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a consolidation of:

CANNER and FREEZER
FOOD PACKER
WESTERN CANNER and PACKER

FEBRUARY 1960

Mid-West glasspacker and canner squeezes 12 months work out of his catsup equipment 19

Western canner ripens his pears indoors—with humidity and temperature controls. 30

Connecticut firm, meeting a rapidly expanding business, freezes pies in Florida (Cover) 26

Your juices need this advantage

Did you know that *l*-ascorbic acid may be added to certain fruit and vegetable juices to standardize their vitamin C content, thus overcoming wide variations which can occur (see table below)? Many nutritionists believe that the public interest is best served when the *l*-ascorbic acid content of processed juices is so standardized. The cost is nominal, the processing simple. A label statement of 100% of the minimum daily adult requirement for essential vitamin C may be made when a 4 oz. serving of juice contains 30 milligrams of *l*-ascorbic acid.

Why send your juice to market with the "handicap" of inadequate nutritional value? Use Roche *l*-ascorbic acid to standardize its vitamin C content. We have helped many processors make their good foods better and we're ready to help you. Why not investigate today?

l-Ascorbic Acid Content of Canned Juices

Below are examples of minimum and maximum levels of *l*-ascorbic acid in commercially canned juices. Note the wide variations! All figures are in milligrams per 100 grams of juice. Data from U. S. Department of Agriculture.

Juice	Min.	Max.
Apple	0.2	3.6
Grape	0	4.7
Grapefruit	10.0	49.0
Orange	9.7	70.0
Pineapple	5.4	18.0
Tomato	2.5	32.0

Orange • Grapefruit • Lemon • Tangerine • Apple
Grape • Pineapple • Cranberry • Tomato
Vegetable blends

No matter which type of processing you use — Canning • Concentrating • Freezing • Dilution in the form of "ades" — your juice will be better when its l-ascorbic acid content is standardized

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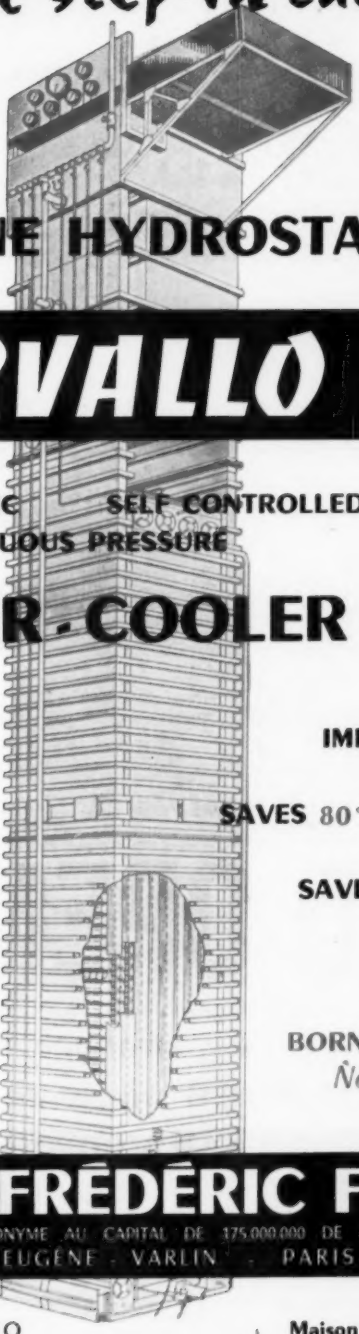

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CANNER PACKER

volume 129, number 2 FEBRUARY 1960

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COVER: In the tubs are apple slices with sugar, a jelling agent, and the rest—part of the secret of producing successful pies. Officials of Farm House Frozen Pies, Inc., with a booming pie business, are keeping the expansion of their operation down to a manageable level—35% a year. How this Connecticut firm produces the same pie—color, flavor, consistency—in Florida is told on page 26.

FEATURES:

Catsup Equipment Works All Year 19
Brooks Foods, Inc., Collinsville, Ill. handles heavy tomato pack—then it's beans, mushrooms, soups, etc.

Automatic Defrost for 0° Storage 22
Lamb-Weston, Inc., major packer of frozen foods uses several new ideas in recently enlarged warehouses in Weston, Ore.

How Uniform Cost Systems Safeguard Packers' Profits 24
A cost accounting system must be able to produce meaningful figures during the pack—first of four articles.

Frozen Pie Secret 26
Farm House Frozen Pies, Inc., Wethersfield, Conn., produces pies in Florida that meet a precise formula.

Palletless Handling of Glass Containers 28
Lift truck with three forks handles pallet load of cases of empty glass containers without using a pallet.

How Turlock Co-op Ripens Canning Pears 30
Modesto, Calif. packer controls temperature in ripening room; installs new grading and dumpling equipment.

EDITORIAL: Are You Ready for What the Sixties Will Bring? 64
Changes in plants, methods, products and markets are ahead, and the technologist will be a very important man.

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In the Next Issue: *A symposium on methods of handling raw products in pallet bins. Useful comments and data by manufacturers and users . . . A Wisconsin glass packer has a really new cranberry product. . . The second in the series of cost accounting for the food processor.*

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CANNER PACKER BUSINESS NEWS LETTER
totally dedicated to serving canned, dry, frozen, glassed food processors

February 1960

Four foods together will give man all he requires in the way of nourishment, according to a study made by Brown University with an IBM 650 electronic computer. Minimum quantities of protein, calcium, iron, phosphorus and five vitamins are supplied by a diet consisting of lard, beef liver, orange juice and soybean meal. However, the computer was unable to tell the researchers how to put the four ingredients together in palatable form; even the laboratory dog turned up his nose at the mixture.

U. S. processing vegetable crop in 1959 (10 major varieties used for canning-freezing-pickling) totaled 6,928,000 short tons, down from the 7,502,400 tons produced in 1958. The smaller harvest reflected reduced acreage and a slightly poorer yield. The five principal crops, in order of tonnage, were tomatoes, corn (in the husk), peas (shelled), snap beans and cucumbers (for pickles). The five leading states in acreage devoted to processing vegetable crops were Wisconsin, California, Minnesota, Illinois and Washington. In tonnage harvested, the five top states in 1959 were California, Wisconsin, Minnesota, Illinois and New York. Other states contributing at least 1% to the harvest included: N. J., Penna., Ohio, Ind., Mich., Del., Md., Texas, Idaho, Wash. and Ore.

Factory production of processed U. S. farm foods has increased an average of 2.6% a year in the past 50 years, significantly faster than the nation's population has grown, Wm. H. Waldorf reports in USDA's Agricultural Marketing. This long-established trend has shown greater activity in recent years. Growth averaged only 1.9% from 1909 to 1939, but since 1947 it has averaged 2.6%. Dairy products and fruit and vegetable items have shown the biggest increases, while meat and bakery and grain-mill foods have grown less than the all-industry average.

Sanitation procedures in U. S. processed food plants are on the edge of a major revolution. The change will be two-fold. On the one hand, with the food additives amendment to the U. S. Food, Drug & Cosmetic Act becoming fully effective March 5, packers will be watching carefully to see that no cleaning materials are left on equipment, possibly to find their way into finished packs. On the other hand, under the spur of AFDOUS interest, plus that of major customers and of FDA officials, a changeover from physical cleanliness to bacteriological cleanliness is in the making. These developments will not have a major effect on the cleanliness and purity of most processed foods - which already are far more likely to be sanitary than those in many a home kitchen - but they will greatly increase the technical control of sanitation, and will no doubt change methods in many plants.

Russian fruit production is to be the subject of Soviet attention, according to reports from behind the Iron Curtain. A Polish writer, Z. Soczek, has estimated that in recent seasons the USSR crop has averaged around eight million tons of deciduous and citrus fruits and fairly close to 1½ million tons of grapes a year. This would indicate per capita consumption to be lower in the Soviet Union than in any European country, and far below U. S. levels.

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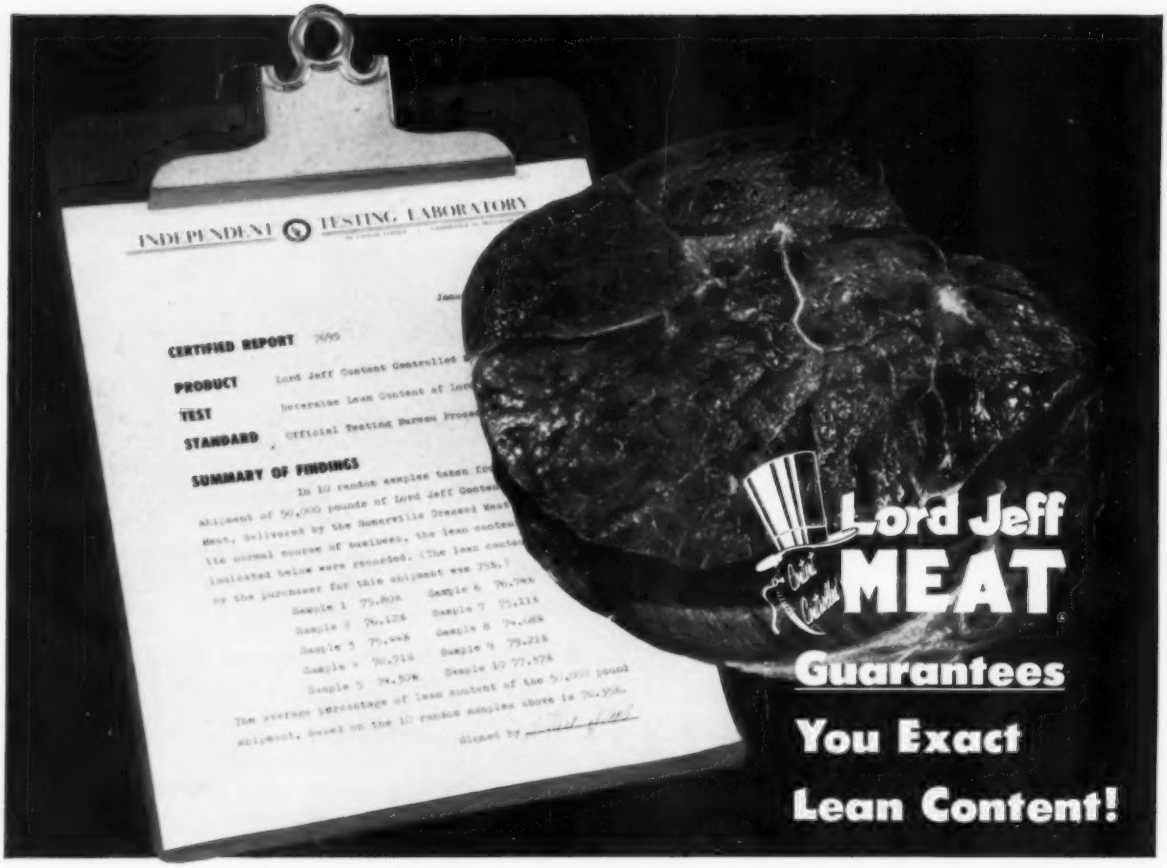

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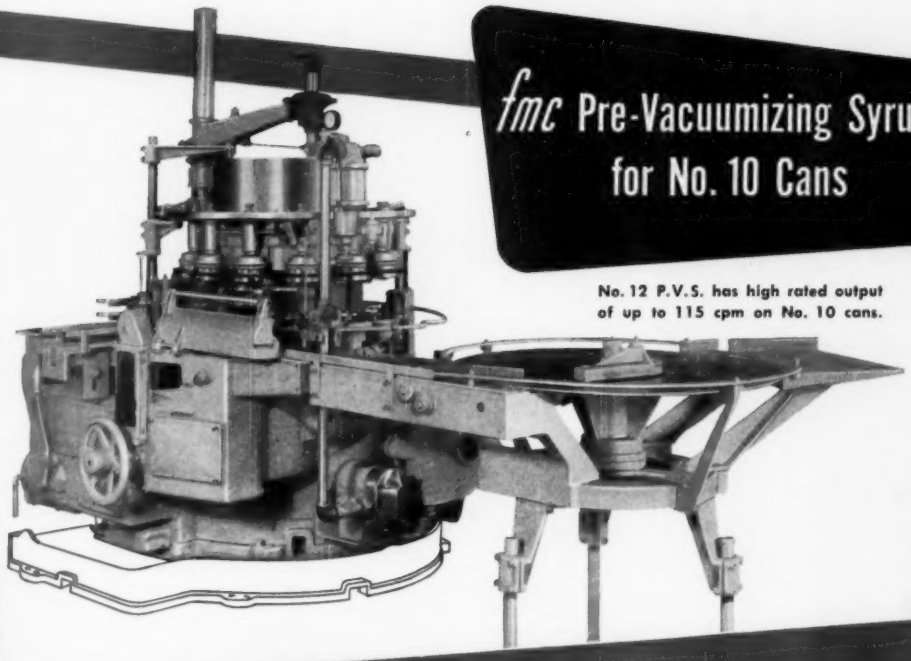

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SYRUP
—up to 2¾ oz. per can!

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Now you can speed up your syruping, greatly improve filling accuracy, and effectively remove entrapped air—all at a savings so great that this new FMC Model No. 12 Pre-Vacuumizing Syruper will more than pay for itself in a short period of high volume packing.

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"Knox furnishes us the packages that sell," say executives of major olive and pickle packer

"When packed in glass, stuffed olives—with their eye-catching colors—are a real stop signal to grocery store shoppers," says the manager of the olive department of one of America's leading food packers,* a major user of Knox glass.

"In our olive department, for example, 85% of the glass jars we use—in nine different sizes—are Knox products.

"We take full advantage of Knox's quality and clarity by hand-packing our olives in patterns that give maximum package attractiveness. We've found that this, plus proper display in the store, can increase a grocer's olive sales by ten to fifteen percent."

*Name available on request.

The manager of the same company's pickle department says: "In modern supermarkets, the product has to sell itself. That's why we use glass—to take advantage of impulse buying. Knox's quality glass can take the strain of the packing process—including the thermal shock of pasteurizing—and still give us the best available sales package."

Find out how Knox's quality product, reliable delivery, and outstanding service can play an important role in increasing your sales by furnishing the package with maximum shelf-impact. Contact Knox Glass, Inc., Knox, Pa., or any one of Knox's 37 sales offices.

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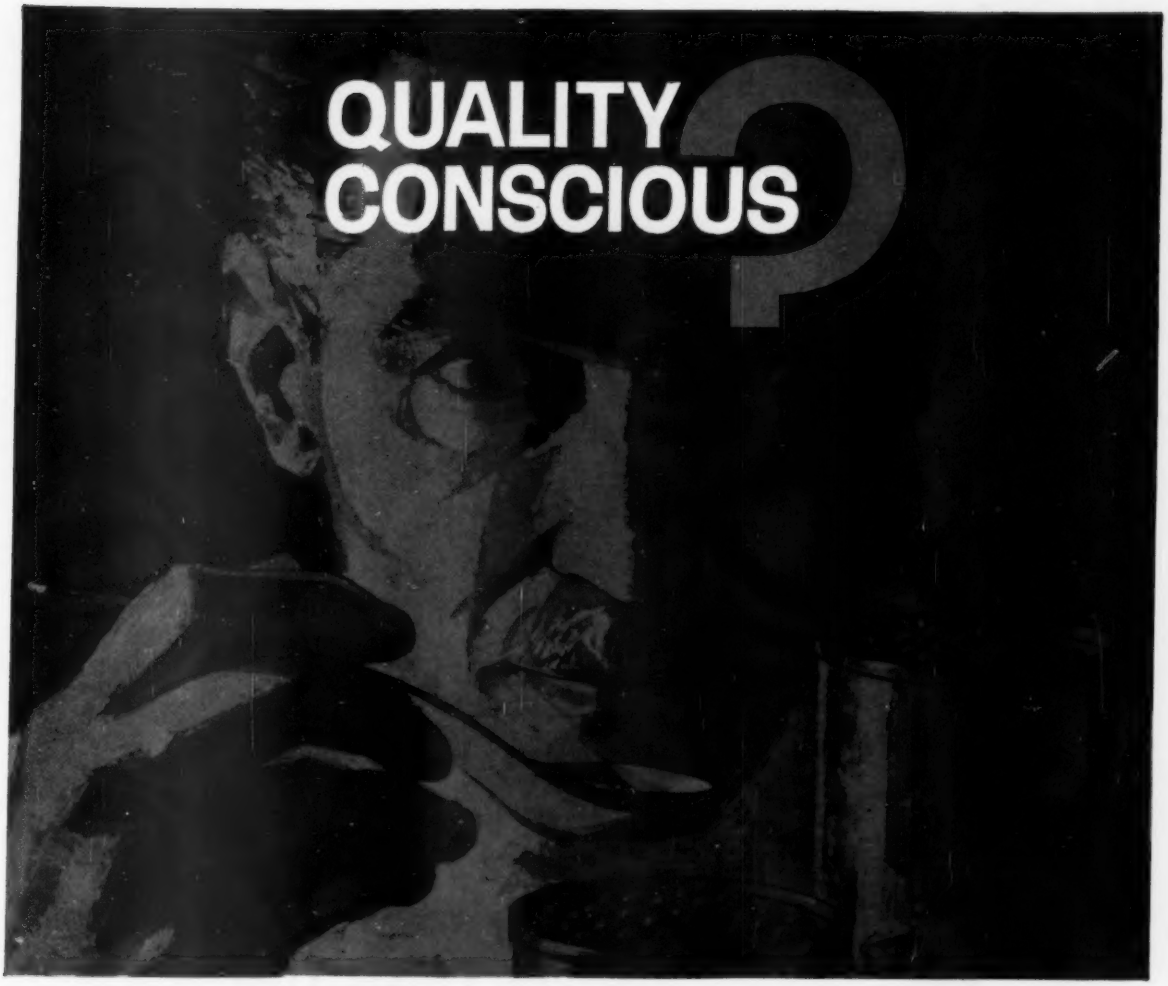

Morton '999' Salt is one ingredient that never varies in quality

Quality-conscious food processors, canners and packers from coast to coast are using Morton '999' Salt because it is the one ingredient you can always depend on for unvarying high quality. In fact, the constant quality of '999' Salt has become the standard of the food industry. With Morton '999' Salt you insure a cleaner, more uniform flavor in all of your processed foods.

Morton '999' is an economical premium-grade salt entirely free from bitter calcium and magnesium compounds that can distort flavor and downgrade product. Morton '999' is always 99.9% clean, pure sodium chloride, exceptionally low in the trace metals copper and iron.

'999' is available everywhere—accept no substitute. Morton '999' is the highest purity salt commercially available anywhere in the United States. '999' quality never varies from shipment to shipment, whether you buy it in bulk for direct salting, or in tablets made to your own specifications—either straight or blended with other flavoring agents. Send for complete information today!

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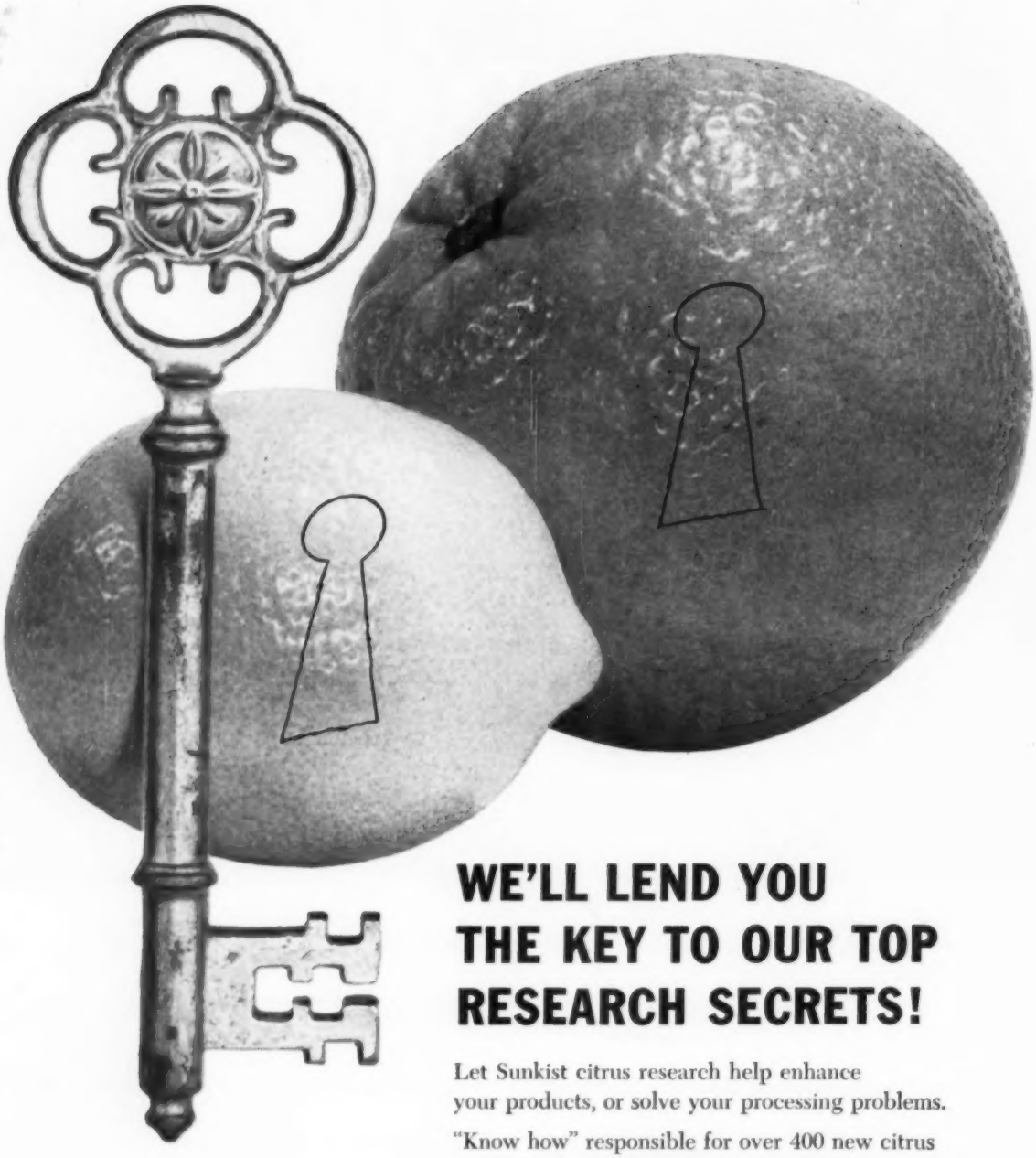

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It may be our files can supply formulas or technical data by return mail. On any problem, simple or knotty, Sunkist technical experts will be glad to work *with* you—in your own plant—or *for* you—in their own citrus research laboratory. Write, and a Sunkist man will call.

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If you're a food processor... fresh, frozen or canned... fruits and vegetables... fish or fowl... lemon juice can do *at least* one thing for you:

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- Prevent oxidation, preserve color, texture and flavor during and after processing...
- Adjust acidity in low-acid foods–retard enzyme action...
- Replace salt in low-sodium diet foods...

And that's only a beginning. The list of jobs lemon juice can do is an extensive one.

If you're not using it... you may be letting the competition get a lead on you. Don't market a product that's merely "as good as" the rest. Exchange Brand Concentrated Lemon Juice—made by Sunkist—can often make it superior for only a penny or two—and add a selling ingredient of distinction to your label.

Why not let your Sunkist man talk it over with you?

The address: Sunkist Growers, Products Sales Dept., 720 E. Sunkist St., Ontario, Calif.

LETTERS FROM READERS

Ravioli Mechanization

In your February 1956 issue we read about an electrically-operated former for ravioli.

As we are interested in the above device, we should be obliged if you would let us know its manufacturer's name and address.

LUIGI TARAGNA
Simmenthal Meridionale, Industria Laziale Conserve Alimentari, Aprilia, Italy.

• *The equipment was installed at Homestead Ravioli Co. in San Francisco, Calif., and was built by M. Rebbizo Co. of the same city*—Ed.

Articles in Japanese

Toyokichi Ohnuma of the Japanese Canners Assn. has completed translation of "Quality Control in Food Products Manufacture," your processing technology handbook article No. 13, and . . is going to send you a copy of The Kanzume Jiho (Canners' Journal) in which it is appearing.

Appreciating the rare value of "Ionizing Radiations in Food Products Manufacture," article No. 7 of your series, he this time wants your authorization to translate it for reprinting in The Kanzume Jiho for the sake of the technical men of Japan.

KENJI SAKAI
2507 Kichijoji, Musashino-Shi, Tokyo, Japan.

Semi-Automatic Closing Machines for Syrup Plant

We are interested in purchasing two canning machines both semi-automatic for sizes #10 and #211x414. Can you please let us know which firm manufactures them.

MAC BOCK
J. B. Syrup Co., Inc., 1836 Bathgate Ave., New York 57, N. Y.

• *We have mailed reader Bock a list of manufacturers. However, anyone who is interested in supplying Mr. Bock is invited to write to him directly*—Ed.

Chisholm-Ryder Is Hard at Work at the Same Old Stand

The syndicated news services have carried the news that the Niagara Falls plant stopped manufacturing operations in December. There seems to be some misconception that the company is going out of business.

Nothing could be further from the truth. We intend to continue in business with renewed effort. It's simply a change in company policy in which this Company intends to sub-contract the manufacture of its equipment in the future to solve a number of problems that face us should we continue to manufacture our own equipment as we have in the past.

We trust that this will dispel any rumor created doubts.

E. MCKINLEY
Sales Manager, Chisholm-Ryder Co. Inc., Niagara Falls, N. Y.

Hearing Aid for a Texas Girl

Last Spring, Mrs. Susie Ortiz and her daughter Esperanza came North with a crew of migratory workers to work for the Krier Preserving Co. at Random Lake, Wis.

That Summer, Rev. Patrick J. O'Connell, of the Redemptorist Seminary of Occonomowoc, was conducting religious classes in the migrant worker camps.

Esperanza

Father O'Connell in working with Esperanza suspected that her hearing was not normal. She had had trouble with school work back in her home town of Austin, Texas, but Father O'Connell felt that poor hearing was responsible.

The girl was taken to Milwaukee for hearing tests. It was found that a hearing aid, would restore hearing immediately, and prolonged treatment could bring her hearing back to normal.

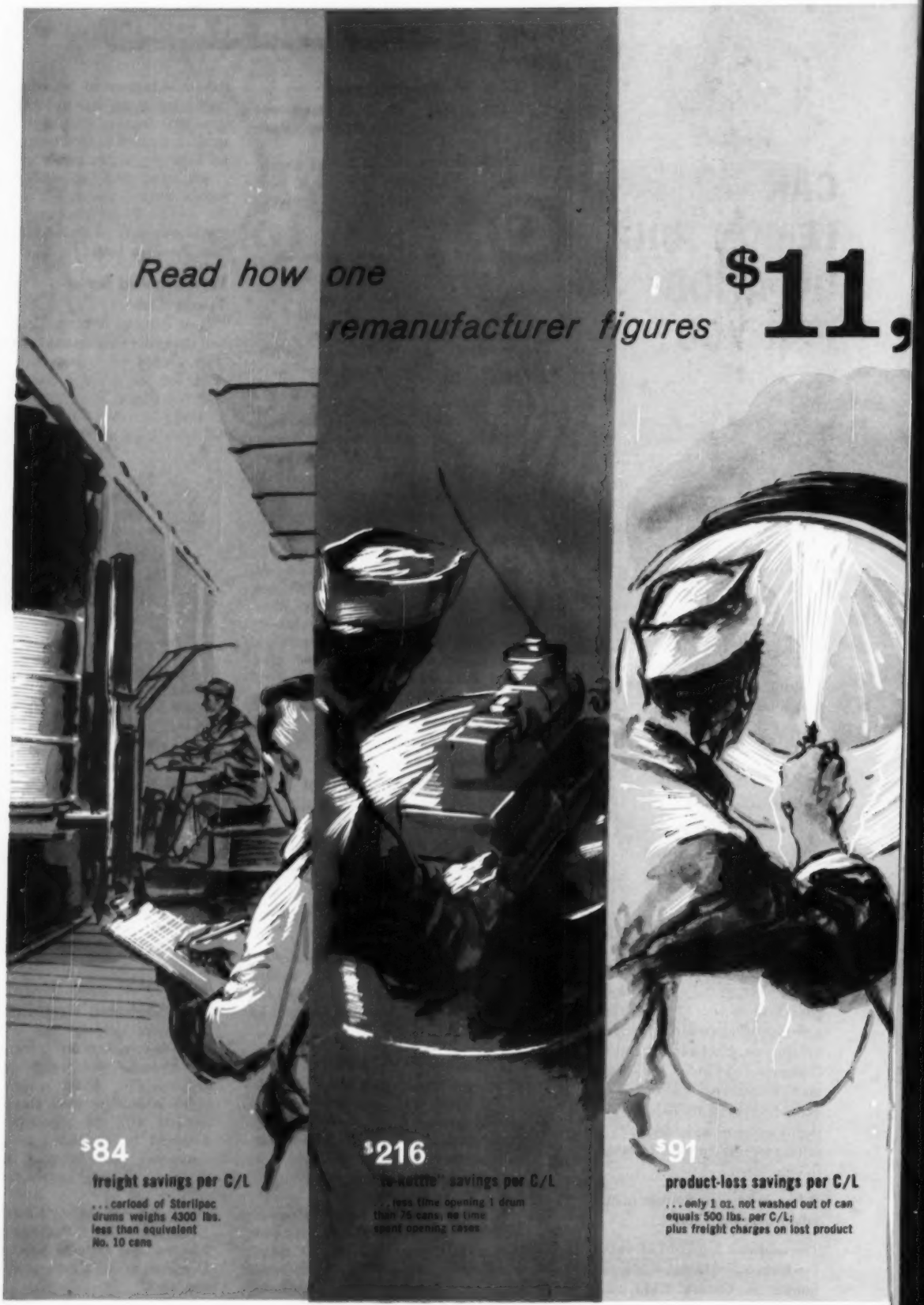
The cost of the hearing equipment was beyond the means of Mrs. Ortiz so the Krier Preserving Co. purchased the hearing aid for her. Esperanza is now back in Austin and is attending the Texas School for the Deaf.

WISCONSIN CANNERS ASSN.
1003 Tenney Bldg., Madison 3, Wis.

New Defense Regulation

We are sending this letter to be sure your readers are informed of the new Defense Materials System (DMS) Regulation 1. Even readers not engaged in defense work should become familiar with the regulation, because it would be expanded in a national emergency and because they might receive a defense contract in the future.

CHARLES A. LEWIS
Containers and Packaging Division Business and Defense Services Admin. Department of Commerce, Washington, D. C.


Read how one remanufacturer figures $11,
$84
freight savings per C/L
. . . carload of Sterilpac drums weighs 4300 lbs. less than equivalent No. 10 cans
$216
"re-kettle" savings per C/L
. . . less time opening 1 drum than 75 cans; no time spent opening cases
$91
product-loss savings per C/L
. . . only 1 oz. not washed out of can equals 500 lbs. per C/L; plus freight charges on lost product

000 SAVINGS

by ordering concentrates in Rheem STERILPAC Drums

These are not Rheem figures. They are figures calculated by a prominent East Coast remanufacturer who estimates he will save $501 per carload by ordering tomato concentrates in Rheem STERILPAC Drums instead of No. 10 cans. Based on his 1959 requirements of 22 carloads, savings come to $11,022... leap to $16,000 on expected 1960 requirements.

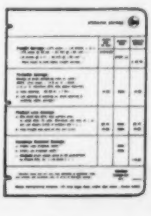
STERILPAC is a brand-new method—revolutionary in concept—that permits food remanufacturers to order concentrates in 55-gallon drums. Each king sized container is equivalent to 75 No. 10 cans. You open, empty and wash only *one* drum instead of 75 cans. No cases to open, either! In addition, STERILPAC drums weigh less, take up less storage space and bring better resale value than the smaller containers. Result: sweeping savings in freight, handling, disposal, product loss and storage costs.

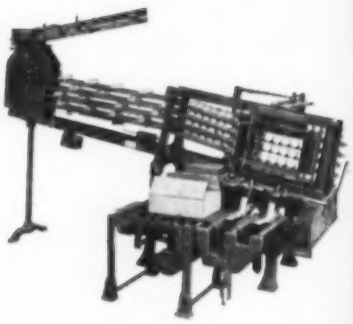
Better concentrate quality comes as a bonus. By sterilizing and flash cooling concentrates *before* they are packed in the STERILPAC drums, canners eliminate potential stackburn. There are no additives involved...no refrigeration required. STERILPAC drums have been shipped across the Equator, and stored outdoors under non-freezing conditions with absolutely no loss of product quality.

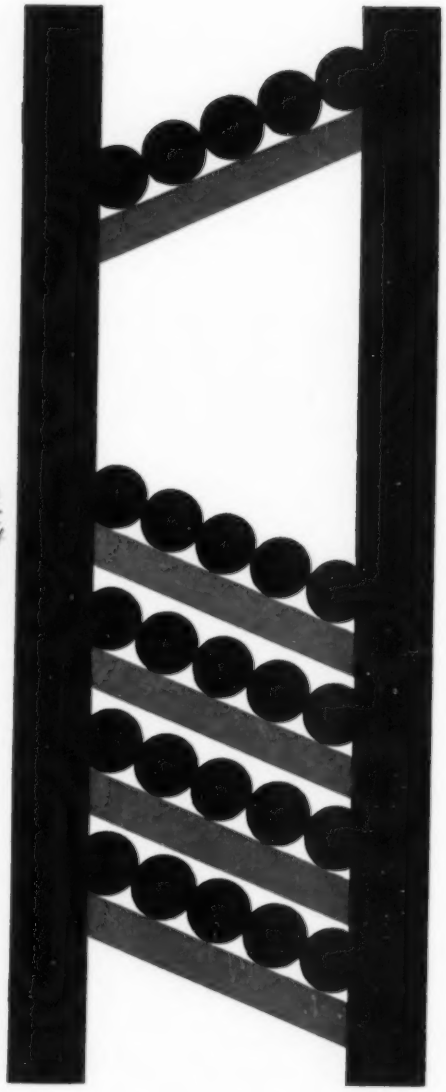
Ask your supplier to send you a trial shipment in Rheem STERILPAC Drums, or write to the world's largest manufacturer of steel shipping containers for more information: Rheem Manufacturing Co., 1701 West Edgar Road, Linden, N. J.

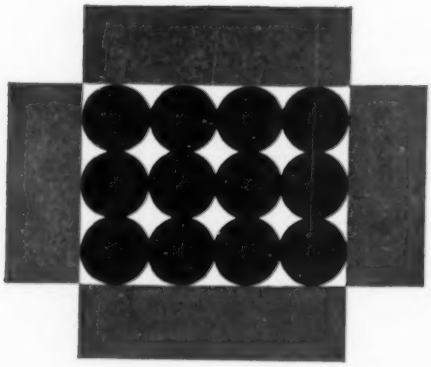
Rheem

Figure your own savings with this easily-completed estimate form. Send for it today!









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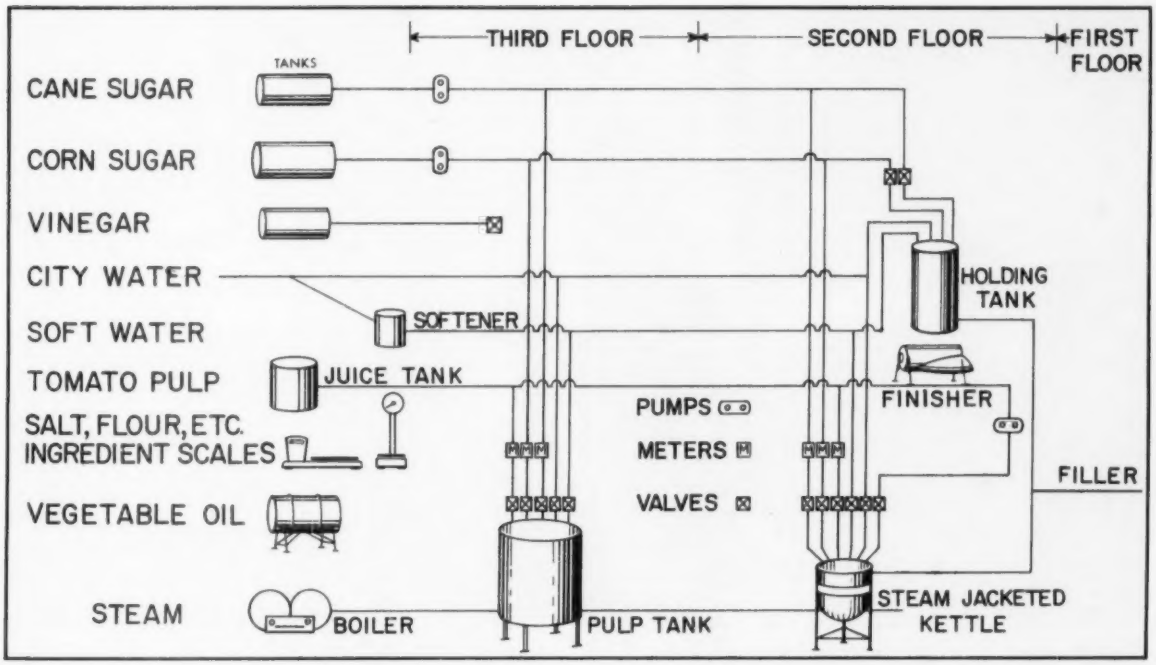
Standard-Knapp Type F Packers use to full advantage the basic physical fact that cans—like wheels—gather speed going downhill. That's why case loading on "F" packers is naturally fast, naturally efficient. Range of the Type F encompasses all standard case patterns, with single or double tiering. Cans roll to the packer and are loaded into cases on their chines. Labels are protected and remain untouched until the cans are removed from the cases. Like to get more information on "F" packers? Write us for the names of users near you or for engineering specifications.

Emhart Manufacturing Company
Portland, Connecticut
Standard-Knapp Packaging Equipment

EMHART



MATERIALS ARE SUPPLIED to the kitchen, largely by pipeline. Both soft water and city water are piped to the pulp tanks. Also, cane sugar, corn sugar, steam, and tomato pulp. Vinegar stored in a 5,000 gal. tank above the kitchen is fed to kitchen through plastic hose.

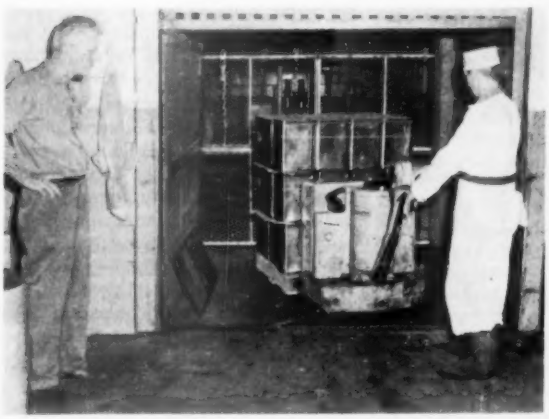
Catsup Equipment Works All Year

When the catsup pack is over, Brooks Foods uses its material supply system for late-season and dry items

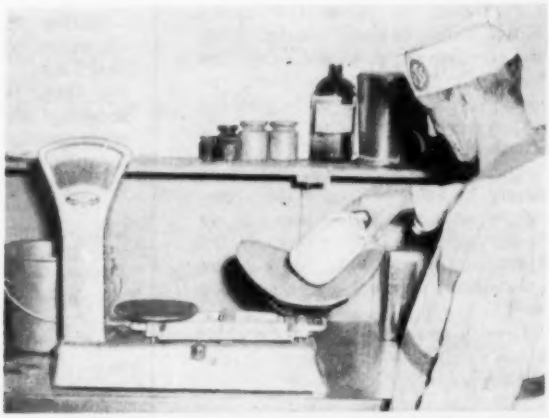
Eight pulp tanks in the third floor kitchen of Brooks Foods, Inc., Collinsville, Ill., cook up tangy catsup 20 hours a day during the tomato season in late summer. At other times of the year, equipment is still in use. For example, on an average day during the winter one tank might be heating water for canned mushroom brine, three more might be cooking bean soup.

Brooks Foods has the problem of any seasonal canner: After the frenzied rush of the tomato season, what do you do with your equipment? What do you do with your production men?

The answer found by Brooks Foods is similar to that of many canning

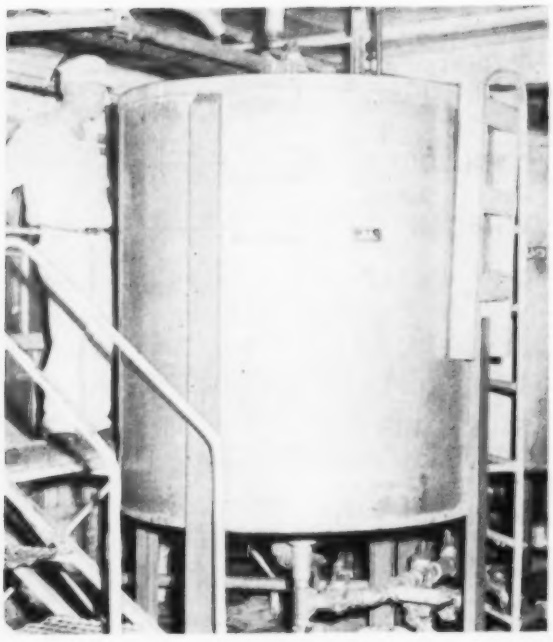


DRY MATERIALS AND CANS of tomato puree for remanufacture are moved by the battery-powered Yale and Towne industrial truck.



INGREDIENTS DOWN TO THE OUNCE are weighed on Exact Weight scale. Larger quantities are weighed by other scales.

PIPELINES NEARLY SURROUND the Langsenkamp pulp tanks. Pipes are painted red for pulp, green for cane sugar, and yellow for soft water.



HOLDING TANKS FOR JUICE DRINKS are also used for mixing the concentrated juice water and liquid sugar. When the formula calls for dry sugar, the mixing is done in a mixing tank.

companies. After the principal pack, the season is stretched with other seasonal items. During the winter months, dry items, remanufactured items and specialty items are packed.

Not all canners operate this way. Big operations such as Green Giant Co., and plants of California Packing Corp., close up their production departments at the end of the season.

Brooks differs, too, from many small canners whose off-season items are not intended as profit makers, but just to pay the overhead. At Brooks Foods, late-season items such as barbecue sauce and vegetable soup, and off-season items such as juicy drinks and pork-and-beans, are all quality items. The formulas have been developed over the years. The quality control standards under George Schuette are just as precise as they are during the regular tomato pack, and once packed, many of these products are marketed carefully under the Brooks label.

These specialty packs figured prominently in bringing about the recent merger with the P. J. Ritter Co., of Bridgeton, N. J., according to Bill Ritter, president. Brooks Foods is now a subsidiary of the New Jersey company.

One characteristic of many of Brook's off-season products is that tomato puree is used.

For this purpose, five-gallon tins are brought out of the warehouse where they have been stored since the seasonal pack. They are moved by lift truck and freight elevator to the kitchen. Here they are unloaded onto the chain belt feed of an automatic opening machine which opens and dumps the cans into a holding tank.

In this way, the company is able to use some of its own products for remanufacture. And it is able to use equipment—pumps, pulp line and pulp tanks—that are standard equipment for a catsup plant.

Other off-season products at the Collinsville plant are intended to fill in the gaps.

- Mushrooms from nearby caves are supplied all year round . . . thus canned mushrooms and mushroom soup could be packed almost continuously.
- Two juicy drinks, Pine-Ora and Hawaiian Punch, have a winter season. They are made from concentrates imported in barrels from California, and have little relation to the rest of the operation. Except that liquid sugar can be metered into the mixing-holding tanks from either the corn syrup line or the cane sugar line. And the juicy drinks are filled on the 46-oz. fillers that are used for tomato juice.
- Many of the materials used in Brooks' soups are produced in the Collinsville plant. Vegetable soup is a late season product. Tomato soup is made from remanufactured puree during the winter months. Chicken noodle and chicken rice (the Collinsville plant recently received its new USDA inspection and approval for chicken plants) are cooked in four steam-jacketed kettles on the second floor of the plant just below the pulp tanks.
- A chocolate flavoring is cooked in another steam kettle and homogenized before filling in the glass line.

Trouble-Shooting

A camera can help with trouble-shooting during the busy packing season of a seasonal plant. In the office of the superintendent of each Brooks Foods plants there is a small box camera with a flash attachment.

During the packing season, the plants are in operation 20 hours a day. There isn't time for the slow, painstaking trouble-shooting. Afterwards, Dick Wegener, production manager for the plants, said, "It is hard to remember what the trouble was."

The camera solves this problem. A minor difficulty occurs on the line. The superintendent solves it as best he can. But then he gets the camera and shoots several angles.

Later, the camera "remembers" the trouble and shows what happened. In the winter there is enough time to figure out how to remedy it.

Over $8 BILLION for food alone to supply the "eat out" market

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To furnish this $8-billion and growing market, look to Owens-Illinois for Duraglas jars to best serve your needs. Call the nearby O-I office or write to Owens-Illinois, Toledo 1, Ohio.

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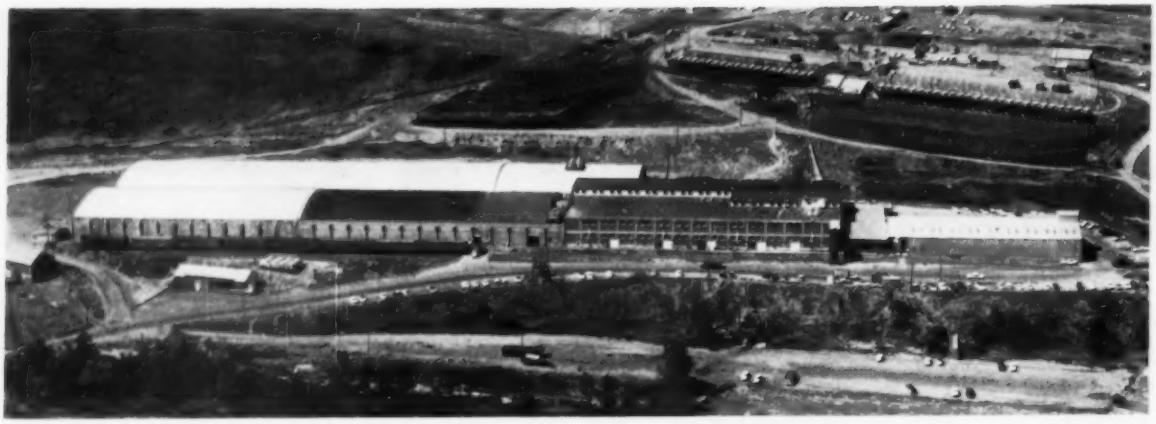


LIGHT-TOPPED BUILDINGS show the new warehousing additions to the frozen pea plant of Lamb-Weston, Inc., in Oregon. The battery of viners seen at the right is located close to the plant to permit vining, grading, inspection and freezing in 20 minutes. In the center background may be seen some of the cattle which utilize the ensilage resulting from the vining operation.

Automatic Defrost for 0° Storage Warehouse of Lamb-Weston, Inc.

Oregon firm completes system viner-to-freezer in 20 minutes

Lamb-Weston, Inc., Oregon firm which packed approximately 11% of the U.S. output of frozen peas in 1959, now has nearly four million cubic feet of space available for zero storage. In preparation for this season's 43 million lb. frozen pea pack, the company added to both refrigerated and dry storage at its plant at Weston, Ore.

"Our shelled-at-the-plant method of handling peas produces a quality that buyers demand," says F. Gilbert Lamb, president. "By this system, peas are brought directly to the plant, vined and processed in a 20-min. span."

Several new ideas in refrigerated warehouse construction for zero storage of frozen foods have been successfully applied. This is said to be one of the largest cold storage warehouses in the country which is operated by a frozen foods plant.

The new facility copies the older warehouse in that there is no floor insulation. The relative dryness of the climate and absence of ground water makes it possible to eliminate conventional floor insulation and subsequent danger of ground-heaving, Mr. Lamb said.

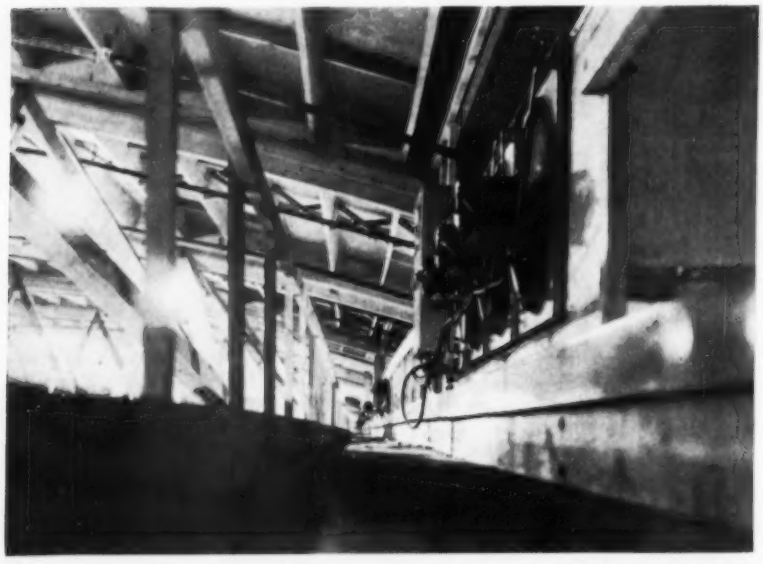
The new, cold warehouse, 125′ x 460′, occupies most of a 720′ by 125′ structure built in only 80 days this past season. It has five inches of styrofoam wall insulation and seven inches of styrofoam insulation on top of the roof deck, covered with a regular roofing felt and asphalt mop. The other half of the warehouse is used for dry storage.

The refrigeration system is unusual. Designed and installed by Lewis Refrigeration Co., Seattle, the system features 12 special truss-mounted Lewis blower units which are mounted in every other bay in the big one-room section of the new zero storage. The units blow cold air across the room to maintain an average temperature of minus 10° F. There is no duct work.

The most striking feature of this installation is that the defrost is completely automatic, defrosting in sequence with the aid of hot ammonia gas which is piped 700 ft. from the refrigeration system.

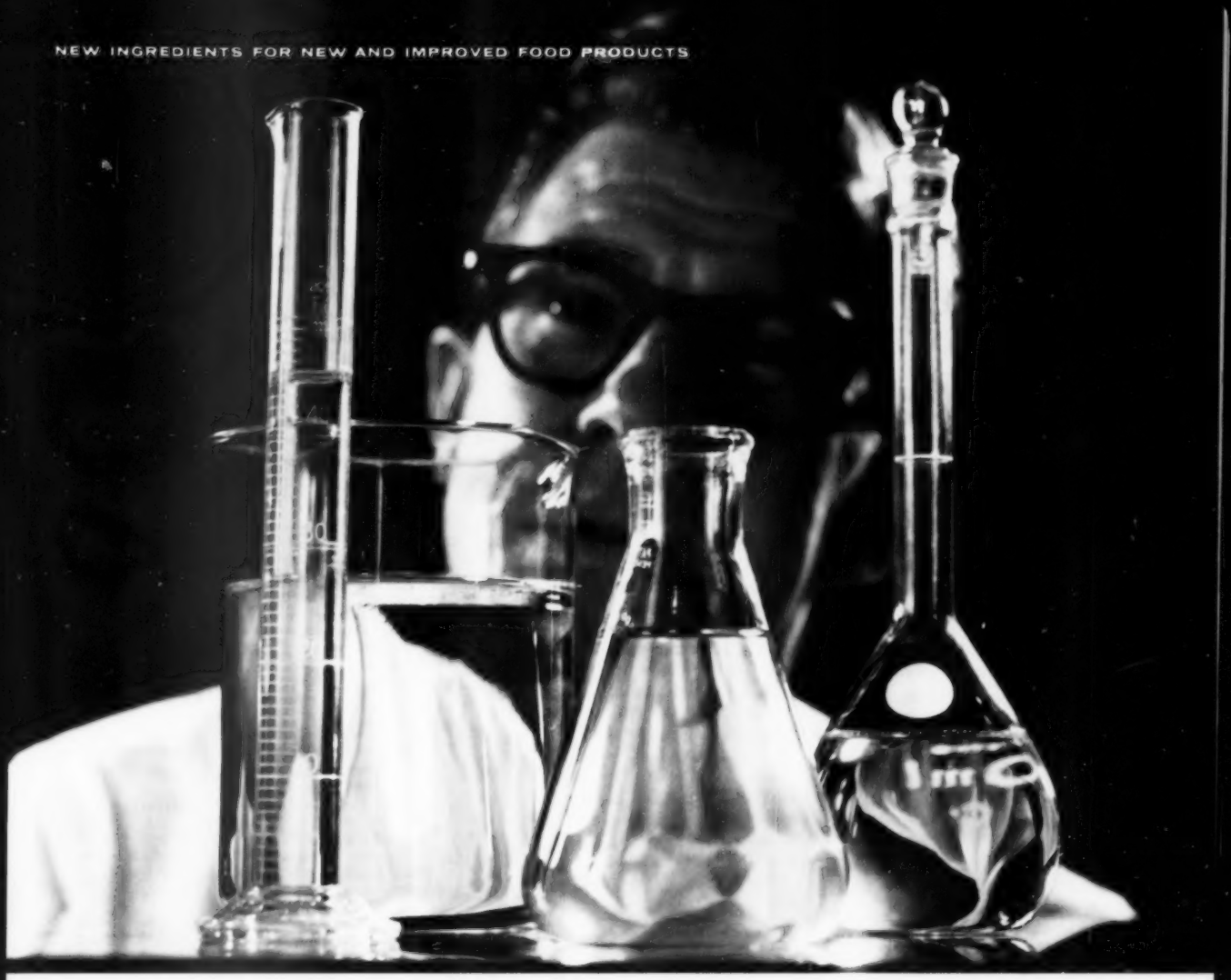
With the use of the ammonia gas defrost method, it was possible to install relatively small drains for the elimination of water, Lamb said. The use of the no-water defrost also eliminates the hazard from water freezing in the defrost system.

The units are controlled by individual control cabinets, housing all starting and defrost controls. A visual check of pilot lights mounted in the cabinets, which can be easily seen from the floor below, indicates the stage of defrost.



TWELVE TRUSS-MOUNTED BLOWER UNITS are mounted in every other bay, accessible from an upper level balcony in Lamb-Weston's refrigerated warehouse.

NEW INGREDIENTS FOR NEW AND IMPROVED FOOD PRODUCTS



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How Uniform Cost Systems Safeguard Packers' Profits

First of series of four articles outlines basic principles required

Four men with excellent backgrounds in processed food accounting provide this practical series of reports on how to profit from sound accounting methods.

All four originally delivered papers on the subject at a 1959 processors workshop conducted by University of Maryland, in cooperation with Tri-State Packers Assn. and National Canners Assn. Their reports have since been revised and rewritten for publication in Canner/Packer.

Following the general article in this issue by Mr. Brown, future issues will carry information by Dr. Amihud Kramer on raw product cost control, by Dr. Howard L. Stier on plant costs, and by Dr. Wayne Bitting on marketing cost data—Editor.

By GAIL N. BROWN

Touche, Niven, Bailey & Smart Rochester, New York.

During the years since World War II, the food processing business has become increasingly complicated. The processor can no longer merely put the product into a container and sell it. Competition, government controls, income taxes, etc., have forced the processor to pay more attention to his general accounting, and, more specifically, to his cost accounting.

The food processing industry, particularly with respect to its smaller units, has not been noted for large profit margins. It is also an industry in which substantial variations in cost occur among packers. To illustrate this point, a recent industry cost study report for Green Beans disclosed a difference of over $.40 a case (basis 24/303, fancy, & sieve, cut) in the grand total cost between the high and low cost groups.

Uses of Cost Control

Because of low profit margins and wide variations in costs, food processors must exercise great care in their cost calculations and in the analysis and use of those costs. Factual cost data is not only important in arriving at adequate selling prices in relation to costs, but it is also important in the correction of faulty production practices and in the elimination of unprofitable items.

Careful analysis of the food processor's daily costs will serve to disclose avoidable losses, or the break-even points in the utilization of direct labor and raw product, enabling prompt correction of production errors. If, for example, a canner's experience indicates that fancy, small sieve size green beans are good profit items, and that standard, large sieve size beans are his low profit or loss items, he should know daily if his raw product deliveries are producing desirable grade yields. Of course, he should know, on a daily basis, whether or not the case yields, or recovery yields, are equaling the estimate. He should also know if direct labor costs are in line with industry yardsticks and his own preseason estimates. End-of-season, or year-end analysis, is good historical reading but it does not correct mistakes made during the packing season when those mistakes might possibly have been corrected.

Uniform Practices Helpful

Canners and freezers are becoming increasingly "cost conscious." as a result of this attitude, many of these processors, in various geographical areas, have adopted a uniform cost accounting system and cost reporting program. This system is explained and discussed more fully in a manual entitled "Cost Accounting for Fruit and Vegetable Canners" prepared by Mr. Wayne E. Mayhew.

Very briefly, a uniform cost accounting system may be defined as (1) a uniform classification of accounts, (2) a uniform method of allocating certain elements of direct costs to sizes, styles and grades of pack, particularly direct labor and raw product and (3) a uniform method of prorating indirect costs to all items.

Classification of Accounts

As previously stated, industry uniform cost accounting requires a uniform classification of accounts. This classification should be a functional one and the elements of cost should be arranged in logical groups. The following is the classification used in the Mayhew cost accounting system:

Group No. 1: Manufacturing Costs, including:
(1) Direct labor, (2) Indirect labor, (3) Raw product, (4) Tin or glass containers, (5) Shipping cases, (6) Sugar or other ingredients, (7) Fuel, power and water, (8) Other direct supplies and expense.

Group No. 2: Indirect Manufacturing Costs (Factory Burden), including:
(1) Taxes and insurance on facilities, (2) Maintenance and repairs of facilities, (3) Depreciation and plant rental, and (4) Factory supplies and expense.

Group No. 3: Direct Shipping Costs, consisting of:
(1) Labels used and label allowances, (2) Labeling and shipping labor, and (3) Freight or delivery expense. This group of expenses represents costs which are applicable to the quantities shipped and not to the quantities packed; this distinction makes it necessary for them to be placed in a separate group.

Group No. 4: Direct Selling Expenses, consisting of:
(1) Brokerage paid or allowed, (2) Cash discounts allowed, (3) Swell allowances and claims. This group of expenses is applicable to the goods which have been sold and billed and not to the goods which have been packed.

Group No. 5: General Overhead Expenses, consisting of:
(1) Interest and other financial expenses, (2) Administrative and office salaries, (3) Executive expenses, (4) Office supplies and expense, (5) Other administrative expenses, (6) General selling expenses. All of these expenses are general in nature and only indirectly related to the cost of producing and selling, making them fall naturally into a separate group.

These classifications are used in uniform industry cost accounting programs.

Proration of Direct Costs

Certain cost elements, which are different for each commodity, must be segregated by dollar amounts for each product. A further allocation must be made to segregate the total cost to styles, sizes, and grades in each product. This is done by an arithmetical calculation involving the use of "cost allocation factors." The use of these factors is illustrated in the following theoretical computation for "Receiving and Preparation Labor" for applesauce.

Can Size	Actual Cases Packed	Cost Allocation Factor	Converted Cases	Allocated Cost per Case
24/303*	73,125	1.00	73,125	$.2200
24/2	4,562	1.22	5,566	.2684
6/10	10,915	1.62	17,682	.3564
48/8 oz.	12,148	1.02	12,391	.2244
	100,750		108,764(A)	

Total Receiving & Preparation Labor $23,928.08(B)
Cost per Basic Case* (B÷A) $ .2200

The above example is a very simple

illustration of the use of cost allocation factors. The direct labor could have been determined for each can size by actual segregation of the payroll. The significance of factors becomes apparent when as many as 40 different can sizes, styles, and grades are packed for one product, such as beets, making a segregation of actual labor cost impractical.

It will be understood that the results obtained by this procedure are only as accurate as the factors used. It is not the purpose of this article to discuss the development of the factors themselves or their application in the allocation of other costs. It is shown merely for the purpose of illustrating the use of factors. Factors of relationship can, of course, be used also to allocate over-all direct costs to commodities, as well as, for example, to can sizes, and these cost allocation factors become an important part of the uniform cost accounting procedures.

Proration of Indirect Costs

There are a number of methods of prorating indirect costs, all of them somewhat arbitrary. Without a uniform cost accounting system, the methods of prorating indirect expenses could vary substantially from packer to packer. In order to achieve the benefits of a uniform cost accounting system the various elements of indirect expenses must be prorated to products, and to size and grade items within a product, by all canners in the same manner. The principal indirect expense groupings and the method used to prorate each of them are as follows:

Superintendence and indirect labor is prorated to commodities and also to size and grade items in the ratio that this expense bears to the total direct labor. Payroll taxes and compensation insurance are prorated in the same manner.

Factory burden is prorated to commodities and to size and grade in the ratio that these expenses bear to total direct cost.

General overhead is prorated to commodities and to size and grade items in the ratio of the total expense to sales. Direct selling expenses are allocated in the same manner.

It is recognized that there are other methods of allocating indirect expenses which are in accordance with good accounting practice. It is important that the method used be one that generally achieves a reasonably accurate result and is **uniform.** The advantages of the methods outlined above can be briefly summarized as follows: (1) They are recognized methods used in the food processing industry, (2) They are simple to apply both in determining unit costs and in making cost estimates, and (3) They recognize a common business practice of pricing, i.e., the more costly the item packed, the more overhead it can absorb.

Yardsticks of Efficiency

After an industry adopts the objectives contained in the definition of a uniform cost accounting system, the total cost differentials for the participating companies will be on a comparable basis. However, this does not mean that there will be uniformity among the various companies in the total cost of a particular item.

When individual company unit costs have been determined in a uniform manner for each principal product packed, it is possible to combine these unit costs into group averages and to use these averages as "yardsticks" of efficiency. This comparison can be made for each company for each element of cost included in the grand total cost to pack and sell.

GAIL N. BROWN

Green bean costs varied over 40c a case between high and low cost packers.

For certain important elements of cost, the group averages can also be segregated into "high", "middle", and "low" group averages. These groupings indicate the range of cost experience, making the comparative costs more significant. Yardsticks of efficiency become available only through industry cost accounting programs, which are cooperative undertakings by groups of companies having similar products and problems.

Development of Cost Consciousness

These are other important results that can be accomplished by uniform cost accounting programs. In addition to facilitating the preparation of budgets and financial statements, they tend to develop an attitude of cost consciousness on the part of industry groups. It is difficult to achieve cost savings unless each canner knows what his costs are and how they compare with the costs computed on a similar basis by other processors. Differences in costs between an individual canner and the group average, when computed on a uniform industry basis, are real, particularly when they are converted to dollar and cents by multiplying the difference in unit cost by cases packed.

A recent report for one of the industry groups participating in a uniform cost accounting program, disclosed the following information with respect to receiving and preparation labor costs for fancy, 4 sieve, cut, green beans packed in the 24/303 can size.

High cost group cost per case	$ .1748
Low cost group cost per case	.0888
Difference (A)	$ .0860
Average basic cases packed by companies in high cost group (B)	190,000
Difference in labor unit costs converted to total dollars and cents for an average packer (A x B)	$16,340.00

In various cost accounting programs it has been observed that the difference between high and low grand total unit cost packer is not generally due to indirect costs, which are to a large extent influenced by volume, but are due to efficiency in the utilization of direct labor and raw product. However, there is a tendency for companies in the low grand total unit cost group to be low for practically every element of cost. As mentioned earlier, a recent report on green beans disclosed a difference of over 40c a case (basis 24/303 fancy, 4 sieve, cut) between the high and low grand total unit cost group packers. Cost differences among packers do exist and are very real, especially when these differences are converted to dollars and cents.

Cost accounting, particularly with an industry uniform cost accounting program, can be made to pay large dividends to those who use it intelligently. In these days of intense competitive selling, successful companies do not necessarily have the highest selling prices but, through the use of intelligent cost accounting, they generally have low cost when compared with the industry average. Does your company measure up in this important area of cost accounting?

Frozen Pie Secret

Farm House officials say it is all in the ingredients

By Porter V. Taylor

Second generation pie makers Phathon and Charles Matthews, president and vice-president of Farm House Frozen Pies, Wethersfield, Connecticut, are justly proud of the demand for their products. However, this demand has created the problem of ten million pies a year not being enough to go around.

In order to meet the needs of this ever-increasing market, Farm House is expanding rapidly, but not without caution. In order to assure control of quality and cost, the Matthews brothers still give their personal attention to all phases of their expansion program which is limited to a manageable 35% per year.

The Farm House operation at Miami, Florida, is an example of how the firm has developed a new outlet.

Florida Firm Formed in 1954

This plant is a separate corporation, with 54% of the stock being owned by the Matthews brothers. It was opened early in 1954 by two Connecticut men, Bruce Terrell, vice-president of sales, and Guy Accolla, vice-president of production. As former operators of cafeterias and restaurants, Messrs. Terrell and Accolla were already thoroughly familiar with Farm House. Before coming to Miami, they also served a training period at the Farm House headquarters.

DOUGH for Farm House pie crusts is mixed in an Artofex machine, made in Switzerland.

The first Miami operation was established with two trailer-loads of pie-making equipment brought from Connecticut. Al Briggs, Farm House sales manager, flew to Miami to help with marketing in what was then a completely new territory.

Last year Farm House sales from the Florida plant had reached a point where it became necessary to move into a new plant with five times the capacity of the old one. Sales now cover 19 southern states, with some outlets as far away as Arizona.

The new Florida plant is located in the block-long Zero Cold Storage building at Miami. Equipment and methods in use at the one-acre Farm House plant in Wethersfield are so closely duplicated at Miami that, during peak sales periods, pies from the headquarters plant are often used to supplement Miami production without consumers reportedly being able to detect the slightest difference.

Operations Closely Watched

At Farm House, emphasis is placed on cost control of methods rather than ingredients. Material costs are in excess of 50%, which is said to be regarded as extremely high for the industry. Every effort is made to secure raw materials from the same source, regardless of cost. For example, although there are 63 different species of peaches available in this country, Farm House only uses three varieties. The same care is used in selecting apples, cherries, and other fruits.

Mechanization and uniformity of product are bywords at Farm House.

Farm House procedures and recipes are often the result of hundreds of painstaking experiments, but once the product is marketed the consumer can expect identical quality in every package from then on.

Farm House fruit and berry pies are a combination of the same ingredients prepared in two ways. For example, frozen cherries are taken from storage and one portion is thawed and cooked to a liquid base. More of the frozen fruit is then mixed with this base to form the pie filler. This accounts for the fresh taste and the whole cherries or berries found in Farm House pies.

In the processing room uniform results are assured by maintaining a constant temperature and humidity control. Flour, shortening and other dough ingredients are stored at this same temperature.

Manufacture of Pie Crusts

Mixing operations begin with an Artofex dough-mixing machine. The bulk dough is then divided into pie crust size balls with a Colborne dough divider.

These balls are dusted with flour and carried by conveyor to a roller machine where shells and crusts are double rolled first in one direction, then another, to form a circular shape.

At this point another conveyor brings along aluminum pie pans to receive the bottom shell. As the shell is placed in the pan, it passes under a revolving brush which wets the edges to insure a better seal with the crust.

A Colborne filler then ejects the proper amount of the fruit filler mixture, and the top crust is applied. While still on the conveyor, a Reeves crimper trims and crimps the edges.

Mechanical Packaging

The conveyor then proceeds to the packaging equipment where the pies are inserted into the colorful lithographed cartons. These cartons with the pies are packed into cardboard containers holding six pies each.

The cases are loaded onto fork-lift trucks and transferred to the deep freeze.

In addition to the ready to bake apple, cherry, peach, blueberry, strawberry, blackberry and rhubarb pies, the Miami Farm House plant bakes ready to eat pecan, sweet potato, and pumpkin pies. The latter are processed in the same manner as fruit pies, then baked in a special custom built traveling oven.

Cream Pies Are Frozen

The same oven is used to bake shells for Farm House chocolate and coconut cream pies. Pastry for the cream pie shells is prepared on a special Colborne machine, and cream pie aluminum pans have small vents in the bottom to prevent the baked crust from becoming soggy. After the cream pies are filled and topped with whipped cream on an Eveready filling machine, plastic covers are placed over the pies to protect the topping. Pies are then inserted in the lithographed cartons and transferred to the freezer.

Most Farm House pies are marketed through brokers except in Florida. Here pies are sold by brokers, through distributors, and in some instances directly to chain stores and independent supermarkets.

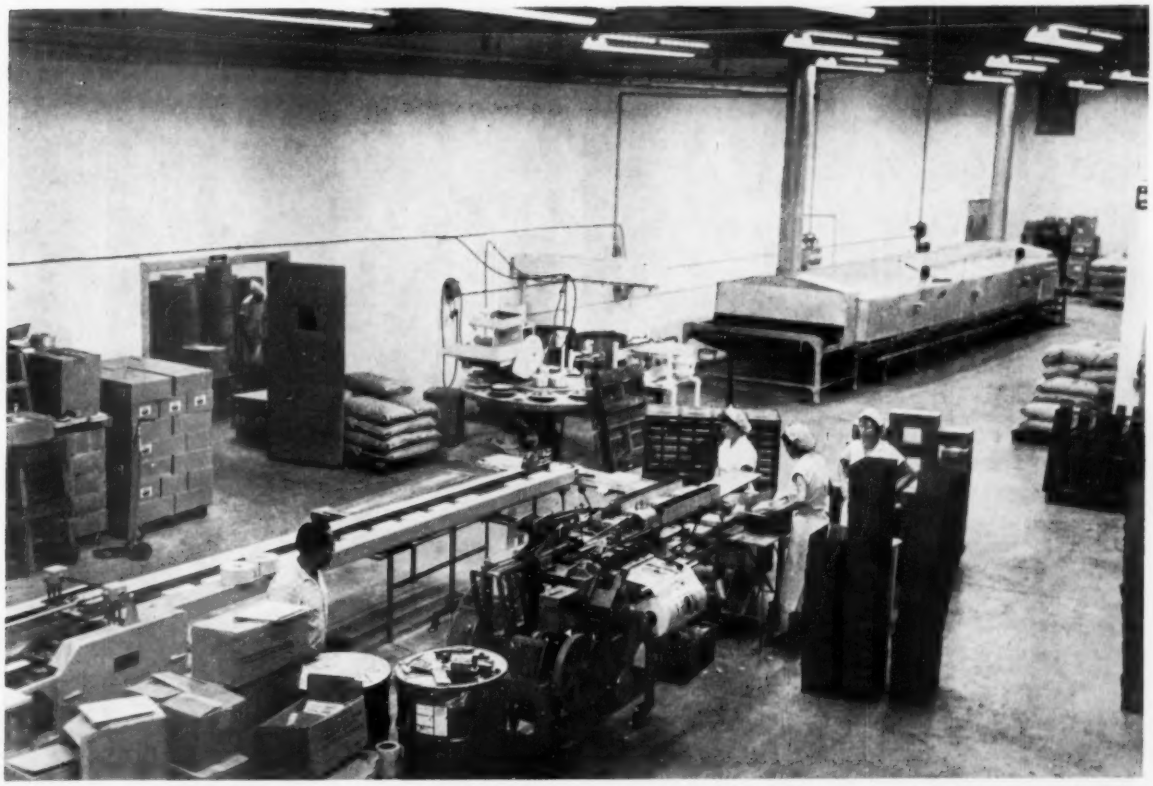
Merchandising Techniques

A variety of advertising methods is used, including television, radio, billboards, and hundreds of special ads on bus benches in the Miami area. Copy on the benches is changed about three times a year, featuring holiday pies such as pecan, pumpkin and mince in the fall, and other products in season. This type of advertising is also used to promote other Farm House products such as macaroni and cheese, potatoes au gratin, and pecan coffee cake.

The latter three products are not yet in production at the Miami plant, but will be shortly. Meanwhile they are supplied from Farm House headquarters in Connecticut.

In addition to the 8-inch pies for the retail consumers, Farm House makes a 10-inch pie for the institutional trade. This is getting an excellent reception among better Miami hotels and restaurants.

COMPLETED SHELLS for Farm House cream pies are removed from the band oven, ready for filling and freezing.



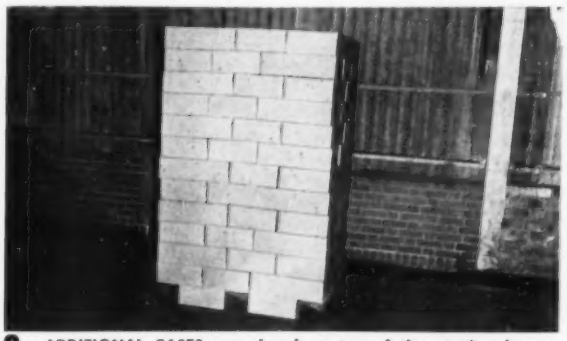
PANORAMIC VIEW of Farm House packaging equipment in the foreground. Cartons are wrapped by machinery in center, and stacked in cases at right, ready for trip to freezer. In the background, left to right, may be seen door to ingredients room, pie filling and crust application unit, and the continuous band oven which produces cream pie shells as well as processing whole fruit pies.

Palletless Handling of Glass Containers

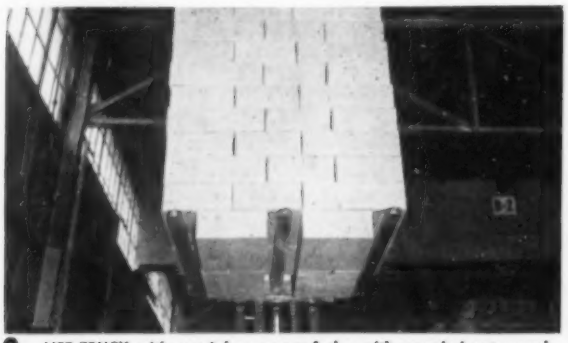
New method uses case flaps or a scored corrugated wrapper sheet and lift-trucks with two or more forks

A new method of palletless glass container handling—utilizing two basic types of unit loads—is currently benefiting U.S. glassed food packers. This method was originated by F. C. Sandusky of Anchor Hocking Glass Corp., and has been used by the company for more than two years to ship glass containers to major customers. The pictures which follow show how cases of jars and bottles are handled with lift-trucks but without pallets.

1 ONE LOAD TYPE BEGINS with unsealed cases, flaps open, forming the bottom layer of an eventual stack of containers. Cases here are arranged for a half-load (half a full trailer width).



2 ADDITIONAL CASES are placed on top of the starting layer, until the full trailer-height is reached. Note the openings left in the bottom row to accommodate lift-truck forks.

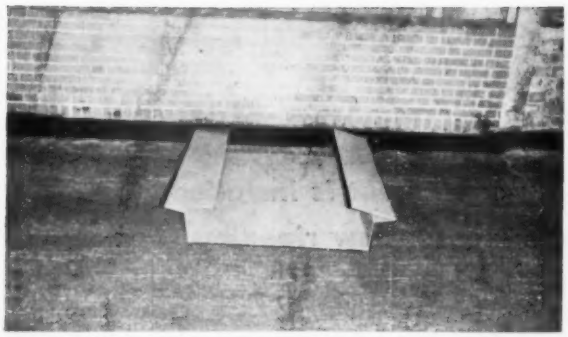


3 LIFT-TRUCK with special narrower forks, with rounded untapered tips, then readily picks up the half-load to carry it from factory to trailer, and from trailer to packing plant.

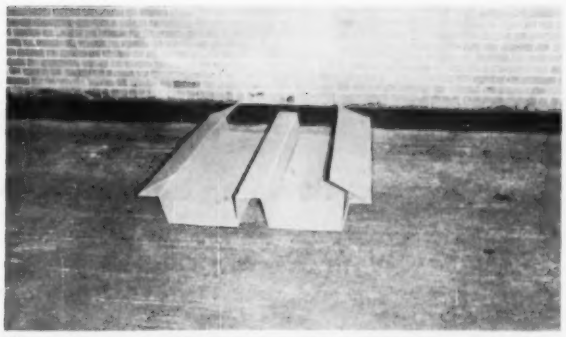
4 FULL LOAD, trailer-wide, is built up in the same fashion as the half-load, with flaps of the first layer of cases spread out to form a bridge over the lift-truck fork openings.

5 UP IN THE AIR goes the full load, as readily handled by a five-fork lift as the smaller stack was by a three-fork truck. This load's width fits a standard trailer body.

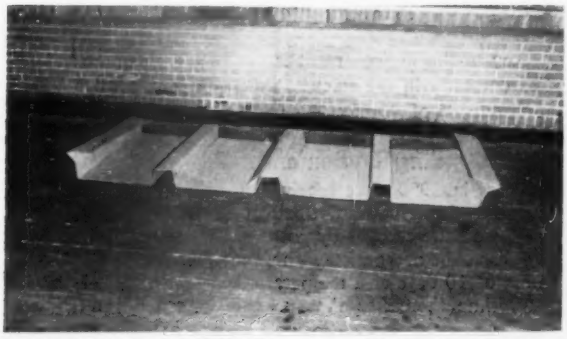
6 COUNTERBALANCED FORK-LIFT is readily modified for this or the following handling method by an inexpensive change in the forks. The truck may still be used for conventional pallets.



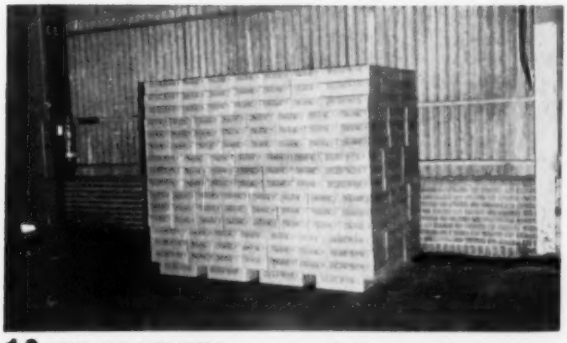
7 SECOND LOAD TYPE employs a scored corrugated sheet to produce the bridge by which the lift-truck picks up the load. Here is a two-fork wrapper.



8 THIS TYPE OF WRAPPER or base sheet provides openings for the forks of a three-fork lift-truck. Above the first layer, stacking is the same as with a two-fork load.

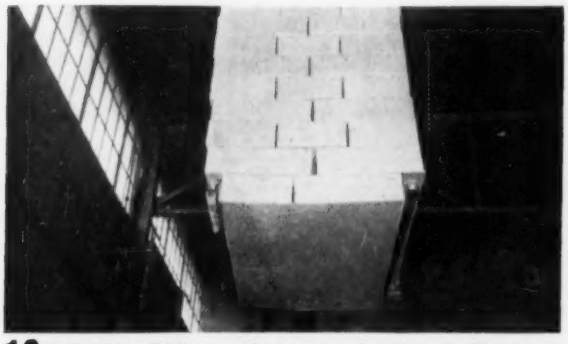


9 FULL TRAILER WIDTH STACKS can be erected on the corrugated bases by using two of the wrappers shown in No. 8 above, their adjacent flaps turned outward so they overlap or underlap.



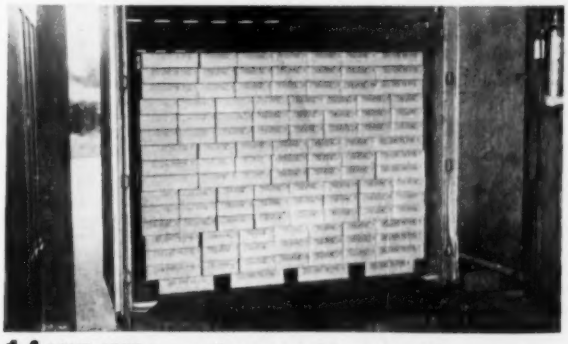
10 AFTER THE WRAPPERS are arranged, the stack of cased containers is readily built up on them. Here a full trailer-wide stack of baby food jars is ready for handling.

11 THE BIG LOAD shown in picture No. 10 is easily picked up by the forks of the counter-balanced lift-truck, to be moved to or from the highway transport vehicle.



12 TWO-FORK STACK is picked up by the lift-truck. This view shows arrangement of the cases, and also demonstrates sturdiness of the corrugated wrapper used instead of conventional pallet.

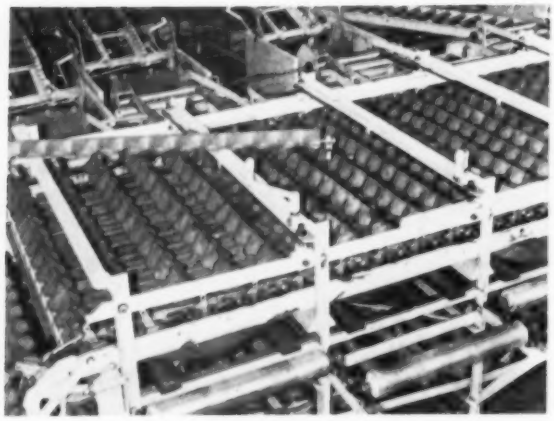
13 LOOKING INTO HIGHWAY TRAILER from the rear, two Anchor Hocking split units are seen side by side. These loads have been carried to the trailer on the bottom layer case-flaps.

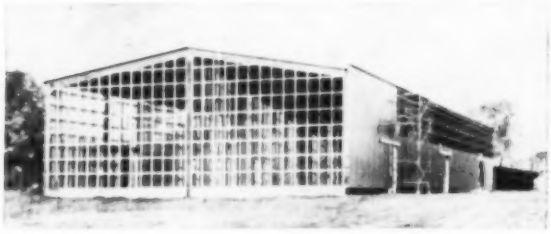


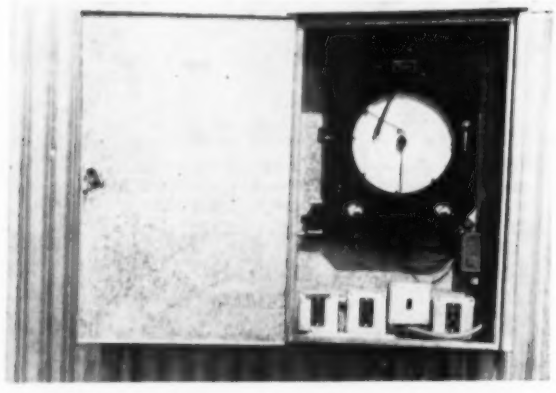
14 SOLID UNIT in a trailer supported by corrugated wrappers on the bottom. Eight of these full stacks normally fill a 35-foot highway transport vehicle.

How Turlock Co-op Ripens Canning Pears

New box-dumping and size-grading equipment is installed. Temperature and humidity programmed in new ripening rooms.







SIZE-GRADER (top view) is seen with lower takeaway belts removed. Pears move from right to left, dropping through between dividers. Latter are gradually spread apart as control arms turn in the space between the machine's sidepieces in the foreground.

LUG-BOX STORAGE SHED (middle scene) in process of conversion to six ripening bays. The pole frame has been studied in at this point, and aluminum sheeting is being applied to the right side.

RIPENING IS AUTOMATED by six control units (bottom picture). Each has Taylor recorder-controller, and a series of switches across the bottom. By setting controller and flicking switches the company programs time, temperature, humidity, airflow.

A new receiving and ripening facility installed at Turlock Cooperative Growers this past season improved efficiency in the cannery at Modesto, Calif., and aided materially in upgrading the quality of the firm's canned pears, according to officials.

Key to the improvement is controlled ripening, a practice common in the Pacific Northwest but relatively little used outside of Washington and Oregon.

New Grading Equipment

Pears in 1959 were received in conventional California lug boxes delivered by flat bed trucks and trailers, and were picked off the carriers by powered lift trucks and placed in TCG's cold storage plant, where they were held for a minimum of 10 days at a temperature of approximately 32° F. Any time thereafter that production schedules required, the fruit was moved out of cold storage and was allowed to heat up for a period of up to 24 hours before size grading.

At the new size grading department the field boxes were manually placed on a chain conveyor which fed them to a Northwest Equipment Co. dumper. The chain holds the boxes against the sides of a six-sided drum whose walls are composed of flexible V-belts to protect the fruit from bruising. The drum revolves with the boxes, turning them upside down, after which the boxes move gently and gradually upward, allowing the pears to travel off on a rubber covered conveyor belt. Dumping speeds range from 500 to 600 boxes per hour, controlled by a U.S. Motors Varidrive unit.

The conveyor belt delivers the pears to a Northwest Equipment size grader. This device consists of a series of irregular cross pieces attached to a pair of chains. These cross-members gradually spread apart as the chain carries them down the length of the grader. Size graded fruit slips through the openings between the cross pieces and is deposited on take-off belts, which in turn travel to five Northwest Equipment automatic box fillers. Lug boxes that have just been emptied come to the box filling stations by means of an overhead chain conveyor, and each is filled with a specific size. Oversize fruit also is caught in field boxes at the end of the grader.

The sized fruit is palletized and carried by fork lift trucks to the new ripening rooms.

New Ripening Rooms

The ripening building was converted from a lug box storage shed. The pole frame building was studded in and covered on the exterior with corrugated aluminum. The walls were then insulated with a 3-inch blanket of Johns-Manville Spintex, and the ceiling was given four inches of the same material. After the insulation was stapled in place, the ceiling and walls were covered with aluminum foil. The building measures 55′ x 190′ (about 10,500 square feet) and is divided into six equal bays of 1,750 square feet each.

Each bay holds about 9,000 lug boxes, or approximately

200 tons of fruit. In practice, it requires about eight hours to load a room with pears and up to 24 hours to bring the temperature and humidity to the desired levels of 68° F. and 85% relative humidity for the ripening operation. This ripening cycle varies from three to four days, depending upon the condition of the fruit.

The Ripening Cycle

Each bay has an independent set of controls, consisting of a Taylor recordercontroller and a series of switches. By means of these control panels, each lot of pears can be programmed to fit the needs of the fruit, the climatic conditions, and the current factory load, by varying the time, the temperature and the relative humidity.

The equipment which makes these adjustments in the ripening chambers possible consists of heating, cooling and air-moving units.

Heat is provided by a Crane heavy duty gas-fired water heater. Heater water moves from this unit to each of the six bays and circulates through coils. Air is drawn across these coils and then forced out into the room by means of two blowers in each bay, the capacity of the fans being 28,000 cubic feet per minute.

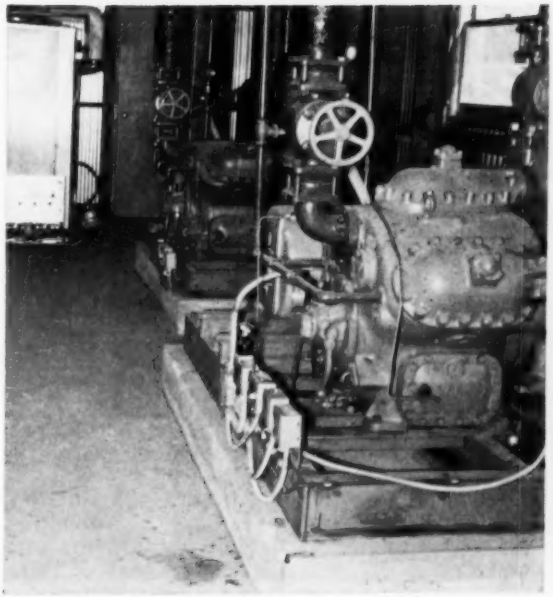
After the fruit has reached the proper ripeness, the ethylene gas developed during ripening is exhausted by fans provided in each bay and the temperature is reduced to 50° F. This slows down the ripening process and firms up the fruit for subsequent handling. Two York V-type ammonia compressors driven by 40 and 50 HP electric motors supply the refrigerant, which is piped to the bays and passed through coils located in the same cooler as those for heating the room. Air is drawn over these chilled coils by the fans and forced out into the bays. One York compressor is a 4-cylinder model and the other is a 6-cylinder, and their combined capacity is 100 tons of refrigeration

Dispersing the Gas

It has long been known that ethylene gas plays an important role in the ripening of pears. As the fruit starts the ripening process it gives off ethylene gas. As more and more gas is accumulated in the ripening room the ripening rate appears to accelerate. This past season TCG experimented with the introduction of additional gas into the atmospheres of its ripening bays, without conclusive results. However, it was able to obtain definite results in the way of slowing down ripening by turning on the exhaust fans and thus dissipating part of all of the gas.

When the ripening cycle is completed, palletized lug boxes of pears are carried by fork lift trucks to the cannery, where they are manually unloaded onto a merry-go-round belt conveyor system which feeds the two banks of Food Machinery preparation machines. Conventional filling and processing steps follow.

In its first year, the installation was highly successful, according to Ed McAllister, TCG's assistant general manager. Except for a few punctures in the foil covering the insulation in the ripening rooms—which are readily mended—operations were conducted without mishap. In all cases, quality of the pack was most pleasing to the company, and plant efficiency was importantly improved.



DOUBLE-BARRELED BLOWER (upper photo) draws air across coils in its base and forces it out through vents next to ceiling. Refrigerant and hot water coils are both housed in the same unit.

BEHIND THE BLOWERS in the six bays are the machines in this room (lower picture). At left is a Crane heavy-duty water heater, and at right are two York refrigeration compressors, with a combined capacity of 100 tons of refrigeration.

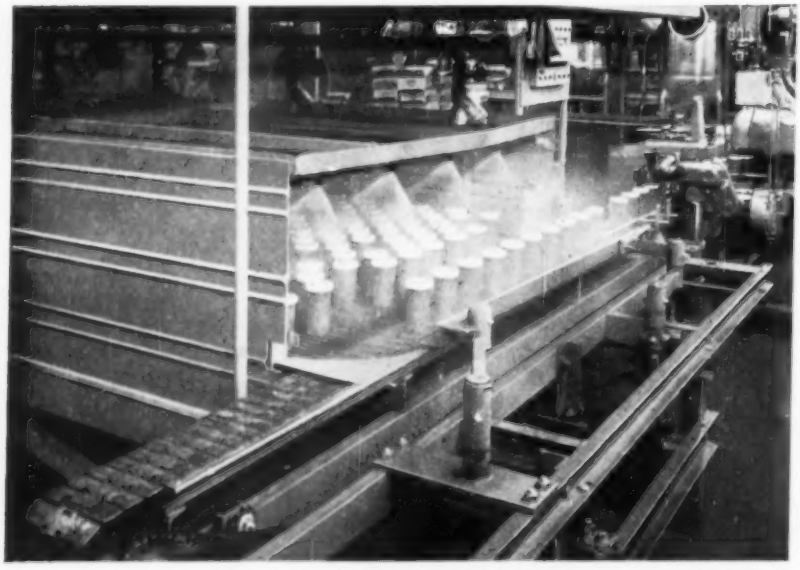
THE HORIX

IDEAL FOR COOKING

Features that Spell Greater Efficiency, Economy, and Trouble Free Operation

- *A complete unit, including infeed and discharge*
- *No Glass to Glass Contact*
- *Equal Processing of Every Container*
- *Smooth Operation—No Tipping*
- *Low Maintenance*

Precise, controlled cooking, pasteurizing, exhausting, cooling, freezing, or drying is assured in the Walking-Beam. Quality fruits, vegetables, jellies, preserves, pickles, juices, catsup, baby food and other products are being processed daily in Walking-Beams.



Infeed end of Walking Beam Deck shows the uniform spacing of containers. This even spacing is maintained throughout the processing chamber insuring equal uniform processing of each container.

POSIT

at INFEED

Installation comes equipped with an automatic synchronous infeed bar and conveyor, driven and timed integrally with the walking-beam deck. This positive infeed action assures the spacing of containers for most effective processing.

during PROCESS

The smooth gentle walking-beam action moves containers without danger of tipping. This principle of design provides trouble-free, low maintenance performance for many years. Each deck section assumes the characteristics of its process, thus assuring uniform, equal treatment of each container.

and DISCHARGE

The specially designed discharge, with assistor roller and conveyor driven by a separate variable speed drive, can be timed for the best control of each container size and shape.

WRITE FOR CATALOGS

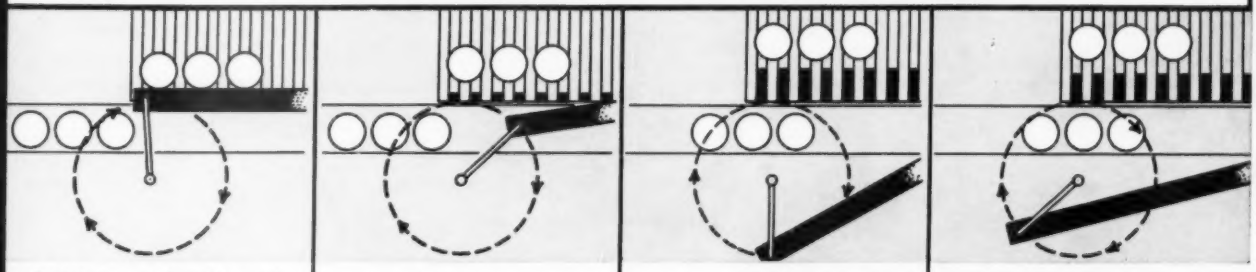
Catalog No. P-591 describes full line of Horix Thermal Processing Units.

Catalog No. 581 describes Horix coordinated line of automatic fillers for liquids and semi-liquids.

WALKING BEAM

• PASTEURIZING • COOLING • FREEZING

IVE CONTAINER CONTROL

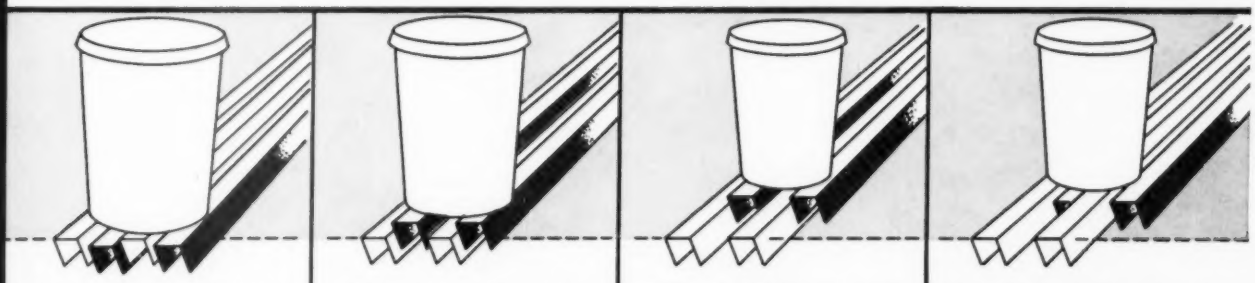


Containers are placed in exact position on the walking-beam deck by the feeder bar timed integrally with the deck action. Containers move . . .

through the processing chambers evenly spaced. Each container receives uniform equal treatment. As the . . .

deck moves forward, the feeder bar moves in position . . .

to place the next row of containers into the processing chamber.

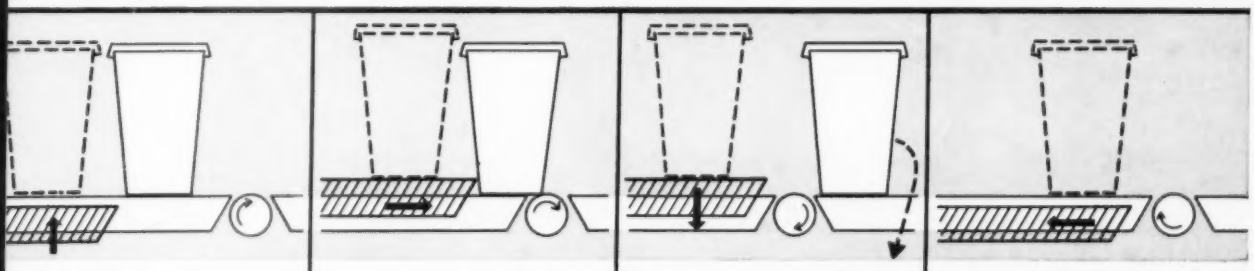


Container rests on stationary deck at beginning of processing cycle. It is then raised . . .

above stationary deck by the movable deck which moves container . . .

forward a predetermined distance at which point . . .

the movable grid lowers and moves back into position to start cycle again.

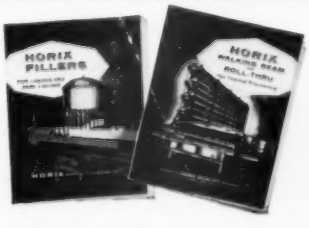


Containers rids on walking-beam deck to the discharge end where . . .

the raised movable deck gently pushes the containers onto the live assistor roller which . . .

transfers them onto the discharge chain which . . .

continues the line to the next operation.



exclusively **HORIX QUALITY** *equipment*

HORIX

MANUFACTURING CO. PITTSBURGH 4, PA.

THEY'RE WHITE CAP

the White Cap FIELD ENGINEER

White Cap's far-famed engineering service isn't just a home plant activity, by any means. Many of its finest achievements are scored right out in customers' plants.

This is where that unique group, *the White Cap Field Engineers*, come in so effectively.

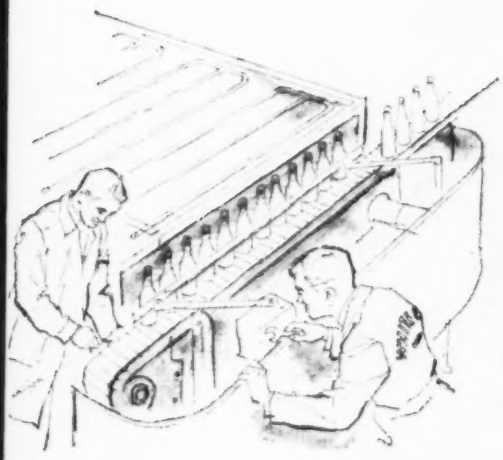
Every White Cap Field Engineer has fully earned the right to be rated as a packaging line planner and consultant. He is at home with any phase of line layout. He functions equally well on the revision of an existent line or the planning of a completely new line.

In all his activities, the White Cap Field Engineer has the extra advantage of strength drawn from White Cap's unequalled pool of glass pack know-how.

Over the years, the work of these field consultants has literally made them famous throughout the industry. Rare, indeed, is the glass pack line that hasn't felt their beneficial influence.

Where else in their field is there another such example of *service-in-action?*

SERVICE-IN-ACTION



the White Cap FIELD SERVICE MAN

Here's a man who really knows his way around a glass packaging line.

Coast to coast, packers recognize him as the watch-dog of the sealing stage.

He's the man who handles immediate situations, and can also act with unique efficiency as a long-range preventive maintenance specialist —and as a teacher.

As part of the largest field service force of its type, he's not just an occasional trouble-shooter, but *a regular visitor*. On his routine visits to our customers, he brings them expert knowledge of the conditions that make for maximum production and maximum sealing efficiency.

What's more, his capabilities have earned him a reputation as a practical advisor on quite a range of packaging line problems.

White Cap Field Service men don't have to come all the way from headquarters, either. Locally located, in strategic spots from coast to coast, they can be on the job fast.

Unequalled anywhere in their special field, *they are White Cap service-in-action.*

WHITE CAP COMPANY

2-60

SUBSIDIARY OF CONTINENTAL CAN COMPANY

CANNED FOODS

Early Reports on 1959 Packs Released

Fruits: U.S. packs of fruit products, in seasons now under way, are reported as follows, in thousands of cases (actual for pineapple by PGAH, actual for applesauce by NCA, 6/10s for apples by NCA, 24/2s for citrus by FCA):

Item/pack through	Year Starts	1958-59	1959-60
Apples	8/1		
Applesauce	8/1		
Citrus salad—11/30	10/1	...	...
Grapefruit—11/30	10/1	581	896
Pineapple—11/30	6/1	15,037	14,141

Juices: Similar data on juice packs to date, from the same sources and in thousands of the same types of cans, are reported as follows through Nov. 30:

Item	Year Starts	1958-59	1959-60
Grapefruit	10/1	866	1,325
Orange	10/1	1,568	3,823
Gr./O. blend	10/1	406	749
Tangerine	10/1	82	66
Pineapple	6/1	11,134	9,752

Tomato products: U.S. 1959 packs of canned tomato products compare with those of 1958 as follows, in thousands of actual cases (per NCA and regional associations):

Item	1958	1959
Tomatoes		
Md./Del.	5,880	3,794
Calif.	13,508	10,173
U.S.A.	29,604	23,000
Tomato juice		
N. Y.	2,134	1,883
Mich.	a	1,129
Ind.	a	3,322
Calif.	13,861	10,918
U.S.	32,621	27,470
Tomato catsup, tin		
Calif.	2,858	2,293
U.S.	3,477	3,073
Tomato chili sauce, tin		
Calif.	273	256
U.S.	594	570
Tomato puree		
Md./NJ./Penna.	381	330
Calif.	2,305	1,833
U.S.	3,397	2,781
Tomato sauce		
Calif.	10,373	8,134
U.S.	10,979	8,686
Tomato paste		
Calif.	8,242	6,160
U.S.	a	a
Tomato prods., misc.		
Calif.	898	1,404
U.S.	a	a

a—Not available.

Other Vegetables: NCA reports the 1959 U.S. canned pumpkin pack at 3,128 thousand actual cases, against 2,997 thousands in 1958. Illinois was No. 1 state in production in both seasons. The 1958-59 U.S. canned sauerkraut pack was 7,059 thousand cases, contrasted with 7,930 thousands in 1957-58. In the season just ended, New York had the largest output, Wisconsin the second biggest.

Poultry: Poultry used in canning and processing during the first 10 months of 1959 totaled 232 million lbs., compared with 216 millions in the like period of 1958, and 261 millions for the entire calendar year 1958, according to USDA.

Canned milk: U. S. canned evaporated milk production in the first 10 months of 1959 was 2,006 million lbs., 1% below the same period of 1958. Production of canned condensed milk, however, had totaled 52 million lbs., up 7%.

Meats: U.S. meat canners, in the first 10 months of 1959, processed 1,068.8 million lbs. of regular products (excluding Mexican foods, spaghetti-meat, soup and government packs), against 1,082.5 millions the year before. Production for U.S. government agencies through October was 55.1 million lbs. in 1959 and 50.3 millions in 1958.

Nationality Foods: U.S. canners packed 149.8 million lbs. of chili con carne and of tamales in the first 10 months of 1959, compared with 138.0 millions in the same 10 months of 1958.

Spaghetti: U.S. packs of canned spaghetti-with-meat totaled 108.6 million lbs. through October 1959, against 88.0 millions in the same 10 months of 1958.

Soup: U.S. production of canned soups-with-meat ran 420.3 million lbs. during the first 10 months of 1959. In the same period of 1958, the pack was 399.6 millions.

DRY FOODS

Nut Crops Are Varied, Milk Packs Down

Tree nuts: The known world filbert crop for 1959 is estimated by USDA at 148.4 thousand short tons (unshelled), compared with 169.0 in 1958. The U.S. states of Washington and Oregon are responsible for 9.4 thousand tons of the 1959 crop, and 7.5 thousands in 1958. Turkey, Italy and Spain are the three foreign nations included in the totals. The known world walnut output is estimated at 149.1 thousand short tons in 1959, unshelled basis, contrasted with 173.7 thousands in 1958. The U.S. states of California and Oregon are leaders in production, with 61.7 thousand tons in 1959 and 88.7 thousands in 1958. Other countries included in the totals are France, India, Iran, Italy, Syria, Turkey and Yugoslavia. India's 1959 cashew crop (including the small pack of Portuguese Goa) is estimated at 66.0 thousand short tons, raw nut basis, about 14% less than the 77.0 thousands produced in 1958. Imports of African raw cashews into India declined from 134.8 thousand tons in 1958 to 92.5 thousands in 1959 (India traditionally re-exports large quantities of African nuts in addition to shipping out most of her own crop).

Milk: U.S. dry edible milk packs in the first 10 months of 1959 included 79.2 million lbs., of whole, 1,363.1 million lbs. of nonfat spray-process, 117.8 millions of nonfat roller-process, and 62.6 millions of buttermilk. The nonfat spray output was a shade above that of the like period of 1958, but the roller output was down 12%, the buttermilk outturn was off 5% and the whole milk pack had declined 2%. USDA announces that purchases of nonfat dry milk in the fiscal year ending March 31, 1959, for price support purposes, totaled 941.3 million lbs. This compares with 829.3 millions in 1957-58 and with 798.5 millions in 1956-57, and is the largest quantity the government has ever bought under the price-support program.

Potatoes: The U.S. 1959 potato harvest is estimated at only 24.3 billion lbs., against 26.6 billions the year before. This may have adversely affected this past season's output of processed potato products. Of the 1958 sales for edible use, 8.6% went for chips and shoestrings, and 3.0% for dehydrated products, plus 8.8% more for starch and flour. Frozen products took 4.2% and canned items 1.4%.

GLASSED FOODS

Some Packs Decline as Total Output Gains

Pickles: The U.S. crop of cucumbers for pickles for 1959 is announced by USDA at 13,968 thousand bushels (of 48 lbs.), slightly below the 14,868 thousand bu. of 1958. Michigan led in 1959 production, followed by Wisconsin, California, North Carolina and Texas. Acreage was down sharply in 1959, but yield per acre was improved.

Olives: The 1959 Greek table olive crop is estimated at 56,000 short tons, up from 41,500 tons in 1958.

Salad dressings: U.S. production of salad and cooking oils (for sale as such and for use in dressings, etc.) totaled 1,376.3 million lbs. in the first nine months of 1959. Comparable figures for 1958 are not available. Indications are, however, that production and consumption of salad dressings will again have shown an increase for 1959.

(Prices on page 38)

METRO IS FOR *efficiency experts*

At Metro, the left hand *knows* what the right is doing. We admire efficiency – in fact, we concentrate on it, nurture it and predicate our business on it. Companies that create a million and one products ranging from food and drugs to cosmetics, beer and liquor depend on that efficiency to ease their packaging problems. We are not satisfied with less than the ideal glass container for any given product, because we believe the years of work and thought behind "your baby" deserve the best possible selling showcase. Day-in and day-out, people who depend on glass, depend on Metro – and its famous follow-through service – ***Metromatic!***

MANUFACTURERS OF QUALITY GLASS CONTAINERS

METRO GLASS

DIVISION NATIONAL DAIRY PRODUCTS CORPORATION

GENERAL OFFICES: JERSEY CITY 3, NEW JERSEY

Processed Food Prices

CANNED FOOD PRICES

F.O.B. packing plant, per dozen containers, as of the first of the month indicated. Data compiled from latest available price lists of individual packers.

Prices are in dollars and cents, with the dollar omitted when the range covers more than one dollar. When the range is 2 dollars or more, the prices are averaged.

$1.75 to $1.95 is written 1.75-95
$1.75 to $2.95 is written .75-2.95
$1.75 to $3.95 is averaged 2.95

CANNED FRUITS

	December 1, 1959 —303—	—10—	January 1, 1960 —303—	—10—
Apples, sliced				
Atl.		12.00		12.00
Wes.		9.50		9.50
Applesauce, fancy				
Atl.	1.30-40	7.50	1.60	7.00-50
Wes.	1.55-64	.50-9.00	1.55-64	.50-9.00
Apricots, ch. hvis.				
Wes.	2.12-17	12.10-60	2.05	
Cherries—Red Tart Pitted, water				
Atl.	1.90	12.50		12.50
Mid.	1.85	10.75	1.75-85	.75-11.00
Wes.	2.07	10.50	.95-2.00	11.50
Cherries—Sweet Unpitted, Wes. ch.				
dark	3.15	17.60		18.35
light	3.35	19.45	3.35	20.15
Citrus—Grapefruit (303 & 46 oz.) fcy. swtnd.				
So.	1.75	9.50	1.75	9.50
Citrus-Salad (303 & 46 oz.) fcy. swtnd.				
So	2.80		2.80	
Cranberry Sauce (No. 300) fcy. puree				
Atl.	1.70-75		1.70-75	
Figs, choice				
Wes.	2.35	13.05	2.35	13.05
Fruit Cocktail, choice				
Wes.	2.12	11.85	2.12	11.85
Fruits For Salad, fcy.				
Wes.	3.05	16.75	3.05	16.75
Olives, Ripe (No. 1 Tall) Wes.				
lg.	2.90	18.10	2.90	18.10
ex. lg.	3.00	18.70	3.00	18.70
Peaches—Clingstone, Wes. ch.				
slice	1.75	9.50	1.75	9.50
hlvs.	1.75	9.50	1.75	9.10
Peaches—Freestone, ch. hlvs. Elb.				
Mid.	1.75	11.25	1.75	11.25
Wes.	1.90	11.25	1.90	10.35
Pears, ch. hlv. Bart.				
Mid.	1.90	11.00	1.90	11.00
Wes.	2.05	11.50	2.05	11.50
Pineapple (No. 2) Wes. fcy.				
Slice	3.75	15.50	3.75	15.50
Chnk	3.42	14.70	3.42	15.70
Crsh	2.90	11.40	2.90	11.40
Plums—Purple, ch.				
Wes.	1.50	7.00	1.50-55	7.00-25

CANNED VEGETABLES

	December 1, 1959 —303—	—10—	January 1, 1960 —303—	—10—
Asparagus (No. 300) fcy. lg. green				
Atl.	3.40	12.00-50	3.40	12.00-50
Mid.	3.00	12.75	3.00	12.75
Wes.	3.00-40		3.40	
Asparagus, White				
Wes.	2.70-90		2.70-90	
Beans, Green Lima, fcy. small				
Atl.	2.10	12.50	2.10	12.25-50
Mid.	2.15	12.00	2.15	12.00
Beans, Green Snap, fcy. cut (Wes. 8. L.)				
Atl.	1.22-53	12.50	1.35	8.50
So.	1.35-80	.50-8.75	1.40-60	8.00-50
Mid.	1.55	9.00	1.55	9.00
Wes.	1.40	11.00	1.77	11.00
Beans, Wax Snap, fcy. cut.				
Atl.	1.35-40	8.00-50	1.70	.50-9.00
Mid.	1.40	9.25	1.40	9.25
Beets, fcy. sliced				
Atl.	.95-1.00	4.50-75	.95-1.00	4.75
Mid.	1.15	5.50	1.15	5.50
Wes.	1.35	6.10	1.35	6.10
Carrots, fcy. diced				
Atl.	1.15-30	.75-6.30	1.20-22	6.25-50
Mid.	1.00	5.00	1.00	5.00
Wes.	1.27	5.25-80	1.27	5.25-80
Corn-Golden, Cream & Kernel, fcy.				
Atl.	1.25-45	.50-9.00	1.25-45	.50-9.00
Mid.	1.35-40	8.00	1.35	.25-8.00
Wes.	1.55-60	8.50	1.55	8.50
Corn-White, Cream & Kernel, fcy.				
Atl.	1.40	8.50	1.40	8.50
Peas, Green (No. 2 sieve), fcy. early				
Atl.	1.85	10.00	1.85	10.00
Mid.	1.45	8.00	1.45	8.00
Peas, Green (No. 2 sieve), fcy. sweet				
Atl.	1.85	8.50	1.70	.50-9.50
Mid.	1.50	8.25	1.50	8.25
Wes.	1.75	8.20	1.72	8.50
Peas, Blackeye (No. 300) fcy.				
So.	1.20-30	6.25	1.20-30	6.25
Pimientos (4-oz.) whole, So.				
tin				
glass	1.85		1.85	
Potatoes, Sweet (No. 3-Vac.), fcy. syrup				
Atl.	1.65	9.50	1.65	9.50
So.	2.60	9.25	2.60	9.25
Potatoes, Sweet (No. 3 Vac.) fcy. vacuum				
Atl.	2.20		2.20	
Potatoes, White, fcy.				
Atl.	1.00-10	.50-6.25	1.00-10	6.25
So.	1.25	6.50	1.10	.55-6.50
Mid.				
Wes.				
Pumpkin (No. 2½), fcy.				
Atl.	1.50	5.50	1.50	5.50
Mid.	1.55	5.00	1.55	5.00
Wes.	1.50	5.00	1.50	5.00
Spinach, fcy.				
Atl.	1.45	7.00	1.45	7.00
So.	1.20	4.75	1.20	5.75
Wes.	1.20	4.75	1.20	4.75
Other Greens, So. fcy.				
trnp	.95	4.50	.95	4.50
mstd	.95	4.50	.95	4.50
poke	1.35		1.35	
Sauerkraut, fcy.				
Atl.	1.15	5.10	1.15	5.10
Mid.	1.25	5.75	1.25	5.75
Wes.	1.35	7.25	1.35	7.25
Tomatoes, Ex. Std. (Wes. fcy.)				
Atl.	1.50	8.00	1.50	8.00
So.	1.25	7.00	1.25	7.00
Mid.	1.50	8.75	1.50	8.75
Wes.	1.40	7.50	1.40	7.50
Tomato Catsup—Tin, fcy.				
Atl.		13.00		11.00
Mid.		10.00		10.00
Wes.		9.29		9.50
Tomato Paste (6-oz.) 26%				
Atl.		10.85		10.85
Mid.		10.85		10.85
Wes.	.90	10.50-85	.84	11.00
Tomato Puree (No. 2½) fcy. 1.045 (Wes. 1.06)				
Atl.	2.00	7.00	2.00	7.00
Mid.		6.50		6.50
Wes.	2.65	5.50	2.20-25	7.00
Tomato Sauce (8-oz.) fcy.				
Atl.	.95	11.00	.95	11.00
Wes.	.75	8.25	.77	8.00-25
Mixed Vegetables, fcy. Peas-Carrots				
Atl.	1.55	9.00	1.65	9.00
Mid.	1.50	9.50	1.50	9.50
Wes.	1.70	10.00	1.62	10.00
Mixed Vegetables, Succotash, fcy.				
Atl.	1.50-95	11.00	1.50-95	11.00
Mid.	1.45	8.75	1.45	11.00
Mixed Vegetables, other				
Atl.	1.40-55	.50-8.00	1.55	8.00
Wes.	1.75	9.75	1.75	9.75

FROZEN VEGETABLES

(Retail per doz.)
(Instl. per lb.)
(Grade A)

	December 1, 1959 —Retail—	—Instl.—	January 1, 1960 —Retail—	—Instl.—
Asparagus—Jumbo, 10-oz., 40-oz.				
Atl.	4.50	.51	4.50	.51
Wes.	3.90	.43-.45	3.35-50	.44-46
Beans, Fdhk, Lima—10 oz., 40-oz.				
Atl.	2.15-59	.24	2.40	.24
Wes.	.65-2.05	.15	.85-2.00	.20
Beans, Baby Lima—10 oz., 40-oz.				
Atl.	2.10-59	.19-.22	2.35	.19-22
Wes.	2.00	.17-.18	.85-2.00	.19½-.20
Beans, Green Snap—Reg. 9 oz., 40-oz.				
Atl.	.88-2.05		1.95	
Wes.	1.50-.55	.17	1.50-55	.13-.18
Beans, Green Snap—Fr. Cut 9-oz., 40-oz.				
Atl.	.88-2.05		1.95	
Wes.	1.50	.16-.18	1.50-55	.18
Beans, Italian—9-oz., 40-oz.				
Atl.	2.35		2.35	
Wes.	1.85	.20	1.95	.20
Broccoli—10 oz., 32-oz., Spears				
Atl.	2.20-38	.22	2.33	.22
Wes.	1.55-80	.18	1.55-85	.16½-.18½
Brussels Sprts.—10 oz., 32-oz.				
Wes.	.95-2.35	.24-.26	2.35-82	.24-.26
Carrots—50#				
Atl.		.07		.07
Wes.		.95		.07
Cauliflower—10-oz., 32-oz.				
Atl.	2.20-38	.19-.22	2.35	.19-.22
Wes.	1.40-80	.15-.18	1.80-85	.18½-.19
Corn, Cut—10-oz., 40-oz.				
Atl.	1.50-89	.19-.22	1.89	.19-.22
Wes.	1.50	.16	1.50-55	.18-.19
Corn, Cob—2-ear, 12-ear				
Mid.	2.69		2.60	
Wes.	1.30-85		.95-1.70	
Kale—10 oz., 32-oz.				
Atl.	1.60	.13	1.60	.13
Mixed Vegetables—10-oz., 40-oz.				
Atl.	.75-2.05	.20	1.93	.20
Mid.	1.45	.18	1.55	.19
Wes.	1.60	.16-.18	1.50-60	.17-18½
Okra—10-oz., 40-oz.				
Atl.	1.70	.22	1.70	.22
Peas, Blackeye—10-oz.				
Wes.	2.25		2.25	
Peas, Green—10-oz., 40-oz.				
Atl.	1.50-67	.16	1.79	
Mid.	1.35	.16	1.35	.16
Wes.	1.30	.12-.15	1.30-45	.15-.16
Peas & Carrots—10-oz., 40-oz.				
Mid.	1.17	.16	1.17	.16
Wes.	1.25	.13-.15	1.25-30	.14-.15
Potatoes—9-oz., 40-oz. Atl.				
F. F.	1.60-69	.19	1.69	.19
whip			1.52	
shred	1.80		1.80	
puffs	1.63		1.63	
Potatoes, 9-oz., 40-oz. Wes.				
F. F.	1.35-40	.16	1.40	.17
shred	1.25	.07½		
Pumpkin & Squash—12-oz., 4-lb.				
Atl.	1.10	.08½	1.10	.08½
Wes.	1.20	.09½	1.15-30	.08½
Spinach—10-oz., 48-oz., Leaf				
So.	1.70	.09½	1.70	.09½
Wes.	1.20-1.35	.08½	1.20-35	.09½-.11
Spinach—10 oz., 40-oz., chopped				
So.	1.70	.10	1.70	.10
Wes.	1.05-35	.09	1.15-50	.09
Succotash—10-oz., 40-oz.				
Atl.	.88-2.15	.21	2.15	
Wes.	1.90	.16-.20	1.65-90	.18-.20

FROZEN FRUITS

	December 1, 1959 —303—	—10—	January 1, 1960 —303—	—10—
Apples (30# sliced)				
Atl.		.11½-.13		.11½-.13
So.		.12		.12
Wes.		.08½-.09		.08½-.09
Apricots (30# halved)				
Wes.		.11		.11
Cherries, Red (30# Pitted)				
Atl.		.13-.14½		.13-.14½
Mid.		.13		.15-.15½
Wes.		.12-.14		.14
Cherries, Sweet (30#)				
Wes.		.10-.20		.22
Grapes and Pulp (44#)				
Atl.		.12½		.12½
Peaches, Freestone (1-oz., 30# sliced)				
Atl.	2.58	.18	2.58	.18
Mid.		.14		.14
Wes.		.13-.14½	1.80-2.25	.13
Blackberries (30#)				
Wes.		.14-.18	1.50	.23½
Blueberries (30#)				
Atl.	3.29	.25-.28	3.29	.25-.28
Mid.		.25		.25
Boysenberries (30#)				
Wes.		.13½		.13½
Raspberries, Black (10-oz. 30#)				
Atl.		.22	2.56	.22
Wes.		.23-.24½		
Raspberries, Red (10-oz., 30#)				
Atl.	2.30-90	.23-.24	2.88	.23-.24
Mid.	2.20			
Wes.	2.20	.23	2.00-20	.20
Strawberries (10-oz. sl., 30# whl.)				
Atl.	2.35-56	.25	2.35-56	.25
Wes.	2.15	.19-.21	2.05-20	.18-.21
Mixed Fruits (12-oz.)				
Wes.	2.75		2.50	

FROZEN JUICES

(Retail per doz. 6-oz.)
(Instl. per doz. 32-oz.)

	December 1, 1959 —303— —Retail—	—10— —Instl.—	January 1, 1960 —303— —Retail—	—10— —Instl.—
Grapefruit				
So.	1.00-42	5.50	1.20	5.50
Lemon				
Wes.	.88		.88	
Lemonade				
So.	1.16		1.16	
Wes.	1.23		.87	
Lemonade, Pink				
Wes.	1.16		.88	
Limeade				
So.	1.00-.32	6.00	1.00	6.00
Orange				
So.	2.00-37	.50-9.00	1.50	7.50
Wes.	2.37-58		2.10-37	

SUPPLIERS NEWS

Companies and Plants

Hoerner Boxes, Inc., Keokuk, Ia., is constructing a new sheet plant at Mission, Texas. It will be approximately 20,000 sq. ft. and will be ready for operation about the middle of February.

Associated Seed Growers, Inc., New Haven, Conn., has changed its name to Asgrow Seed Co.

Hazel-Atlas Glass Div., Continental Can Co., New York City, will build a $1½ million research and development laboratory at Plainfield, Ill.

Chippewa Plastics Co., Chippewa Falls, Wis., a div. of Rexall Drug & Chemical Co., has purchased the Salinas, Calif., facilities of Package Containers, Inc. The west coast plant will become Chippewa's Flexible Packaging Div., and will produce a wide range of flexible packaging, including polyethylene film, foils and cellophane.

Resisto Chemical, Inc., Wilmington, Dela., has purchasd Dri-Dux, Inc., manufacturer of Dri-Dux plastic coatings. The acquired firm will be operated as Dri-Dux Div. of Resisto Chemical. National distribution of its products will be handled by the parent company.

Hoffman-La Roches Inc., Nutley, N. J., manufacturer of chemicals, is one of two industrial firms to receive the Atkins Award, presented annually by the New Jersey Science Teachers Assn. The award is given in recognition of outstanding assistance in the development of more effective classroom science teaching.

National Can Corp., Chicago, Ill., is constructing a 125,000 sq. ft. plant at Hanover, Pa. It will be ready for production in the second quarter of 1960.

West Virginia Pulp and Paper Co., New York City, is giving full divisional status to its multiwall bag operations. Victor S. Luke will head the new Multiwall Bag Div.

Pennsalt Chemical Corp., Philadelphia, Pa., will invest about $500,000 in a new blending, packaging and warehousing plant at Atlanta, Ga.

Crown Cork & Seal Co., Inc., Philadelphia, Pa., has established a new sales region—south west region—to service Colorado, Kansas, Missouri, New Mexico, Oklahoma, Texas and Arkansas with Leonard S. Martin as regional sales manager.

The Canco Div., **American Can Co.,** New York City, has announced its pricing program for 1960. Although prices are slightly higher (effective Jan. 15), in most cases they will remain well below levels prevailing prior to a new pricing policy established in November 1958.

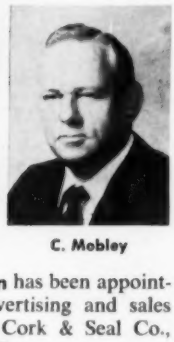
The research and development facilities of **White Cap Co.,** a subsidiary of Continental Can Co., Inc., are being consolidated with those of Continental's Bond Crown and Cork Div.

Hoffman-La Roche Inc., Nutley, N. J., has announced the formation of a new Vitamin Division territory in the Southeast. James E. Chadwick has been appointed territory representative.

Men in the News

Frank H. Kimball has been appointed vice president in charge of West Coast operations, National Packaging Corp., Fort Wayne, Ind.

J. T. Hanlon



C. Mobley

Joseph T. Hanlon has been appointed manager of advertising and sales promotion, Crown Cork & Seal Co., Inc., Philadelphia, Pa.

Carlyle Mobley has been appointed sales engineer for citrus canning machinery, Florida Div., Food Machinery and Chemical Corp., with headquarters in Lakeland, Fla.

Jack L. Hendrickson has been appointed product sales manager of food containers and home canning jars for the Hazel-Atlas Glass Div., Continental Can Co.

Paul S. Trible has been appointed to the newly created position of general sales manager of the International Salt Co., Scranton, Pa.

Gerald R. Grant has been appointed Chicago district manager, Container Div., Container Corp. of America.

Robert B. Meneilly has been appointed to the newly created position of general manager—tin mill products for U.S. Steel Corp., Pittsburgh, Pa.

Mason Turner, supervisor of communications control for the sales department of American Can Co.'s Canco Div., has been named assistant director, Containers and Packaging Div., Business and Defense Services Administration, U.S. Dept. of Commerce.

Frank R. Camp has been appointed to the sales department of Muirson Label Co., Inc., Meriden, Conn.

Edward A. Coleman, plastics sales representative in the New York office of the Closure and Plastics Div., Owens-Illinois Glass Co., has been appointed Eastern manager — closure sales.

Donald Wedin has been appointed merchandiser—frozen food packaging, Marathon, Menasha, Wis., a div. of American Co.

Frank K. Greenwall, chairman of the board of the National Starch and Chemical Corp., New York City, has been elected president of the Corn Industries Research Foundation, Inc.

William T. Brady, president of Corn Products Co., New York City, and **A. E. Staley, Jr.,** chairman of the board of A. E. Staley Mfg. Co., Decatur, Ill., have been elected vice presidents of the foundation.

John J. Luviano has been named general manager, Machinery Div., Crown Cork & Seal Co., Philadelphia, Pa.

Thomas J. Schaefer has been appointed sales manager, food packaging, Boxboard and Folding Div., Weyerhaeuser Co., Chicago, Ill.

John McCabe, Donald G. Bergam, and **Stanley J. Pieczarka** are new additions to the seed and plant breeding staff of Ferry-Morse Seed Co., Detroit, Mich.

Paul J. Cardinal, vice president of Hoffmann-LaRoche, Inc., Nutley, N. J., has been appointed treasurer of National Vitamin Foundation, Inc.

Albert H. Clem has been named vice president — marketing, Pennsalt Chemicals Corp., Philadelphia, Pa.

Obituaries

Dexter M. Ferry, Jr., 87, son of the founder of D. M. Ferry & Co., died in Grosse Pointe, Mich., recently. He was chairman of the board of directors of Ferry-Morse Seed Co., Detroit, Mich.

Your challenge of the EXCITING 60's

–87 BILLION MORE DOLLARS TO BE SPENT!

LET ANCHOR HOCKING PERSONALIZED SERVICE HELP YOU KEEP YOUR PACKAGING LINES ROLLING TO MAKE THE MOST OF THE SALES OPPORTUNITIES AHEAD!

Economists predict the boom of the 60's will provide consumers with more income than ever. New markets will be created. New consumers will buy *more* with more "new" dollars.

In competing for new sales and for keeping present markets, glass packaging...with all its appeal, convenience and protection advantages... will be more important than ever before! To help you make the most effective use of *glass packaging*, the Anchor Hocking representative offers prompt, personalized service to keep pace with marketing opportunities.

Your Anchor Man is your contact with Anchor Hocking's Package Engineering and Research Laboratories and Package Design Service. And he works closely with Anchor Hocking plants, making use of their tremendous production capacity to provide dependable delivery on containers and closures. Anchor Hocking Glass Corporation, Lancaster, Ohio—bringing you the extra values of *specialization* in glass packaging.

ANCHOR HOCKING

Get set for the exciting 60's with Anchorglass® Packaging—put an Anchor Man on your team

INDUSTRY NEWS

Companies & Plants

Old Dutch Foods Inc., Blasdell, N. Y., has purchased Craig-Brown Corp., Rochester, N. Y., manufacturer of jams and jellies, its production formulas, and trade-name of the Peter Gust salad dressings. Old Dutch will use this trade name on a new line of gourmet foods that will be introduced soon.

Aunt Nellies Foods, Inc., Clyman, Wis., a major processor of canned peas, carrots, beets, and carbonated mixed fruit drinks, has purchased the Watertown, Wis., plant of Carnation Co. The plant will be used for the firm's expanded production of its convenience and ready prepared specialty foods. Production will begin about February 1.

Brooks Foods, Inc., is planning to dismantle its Converse, Ind., plant. Equipment will be moved to its plant in Mt. Summit where the company's Indiana operations will be concentrated. The Converse plant will be maintained at a receiving station because Brooks plans to continue contracting tomatoes with local growers.

Sugar Rose Canning Co., Tampa, Fla., recently sent a case of canned grapefruit sections to Soviet Deputy Premier Mikoyan in Moscow to help open citrus trade between Florida and Russia. This was done at the request of Florida's Governor Leroy Collins through the Florida Citrus Commission.

Morrell & Co., Chicago, Ill., has announced that the proposed acquisition of Hunter Packing Co., East St. Louis, Ill., by Morrell has been temporarily postponed. This was due to a request from the Dept. of Justice for a postponement while they review the proposed transaction.

Chesty Foods Inc., Terre Haute, Ind., has purchased part of Nic Nac Foods Inc., Lexington, Ky. Chesty Foods bought the Nic Nac trade name and the potato chip and snack-manufacturing division of the business. The rest of the firm which includes packing of frozen foods, pickles and mayonnaise, will be known as Neale Frozen Foods Inc.

Kraemer & Wanke, Inc., packer of bakery supplies, has moved into a new plant at 713 Front St., Teaneck, N. J.

Star Kist Foods Inc., Terminal Island, Calif., has started construction of its $3 million tuna packing plant in Mayaguez, Puerto Rico. Production will begin this June. Thomas W. Crump will head the new plant.

Articles of incorporation have been filed for **Arizona Chip Potato Co.,** of Queen Creek, Maricopa County, Ariz. It lists $3 million capitalization to grow, buy, sell, store, warehouse, process, grade, pack, ship, and market agricultural and farm products. Incorporators and directors are: Donald Ward and S. P. Lipoma of Delano, Calif.; E. E. Hawes, Queen Creek; and Riney B. Salmon, Phoeniz, Ariz.

Articles of incorporation have been filed for **Chipp's Frozen Foods, Inc.,** Phoenix, Ariz., listing $250,000 capitalization for manufacturing, storing, buying, and selling frozen creamery products and frozen foods and confections of all kinds. Incorporators are: Robert G. Chipperfield, Phoenix; Robert E. Derby, Glendale; and Lillie Davies, Phoenix.

Green Giant Co. is planning to build a seed and can warehouse in Dayton, Wash. It will provide between 40,000 and 50,000 sq. ft. of additional storage space.

PACKAGE FREIGHT SERVICE. Previously unused decks of ore and grain ships will be used to haul food products on the Great Lakes. According to Jeno F. Paulucci, president of Chun King Enterprises, the use of these ships will lead to a 15% savings. Chun King shared the first deckload of food products bound for Duluth to Detroit and Cleveland aboard the S. S. Norman W. Foy (shown above).

Men in the News

James H. Bock has been named general manager of Mid-Florida Citrus Coop., Orlando, Fla., a grower-owned organization producing frozen citrus concentrates.

Milton Dills, northern regional sales manager, Stokely-Van Camp, Inc., will be in charge of new sales offices for the frozen food division located in Pittsburgh, Pa.

J. P. Hoban, Jr.

C. W. Lundell

John P. Hoban, Jr., has been appointed director of sales for the Bond Pickle Co., Oconto, Wis., a division of Beatrice Foods Co.

Conrad W. Lundell has been appointed sales manager for all Salada-Junket products, Salada-Junket div., Salada-Shiriff-Horsey, Woburn, Mass.

Edward de Lancellotti has been named vice president in charge of advertising and promotion for the Buitoni Foods Corp., South Hackensack, N. J.

Howard Lochrie has been named advertising manager for the Birds Eye div., General Foods Corp., White Plains, N. Y.

Richard Maass has been appointed eastern division sales manager of Breast O' Chicken Tuna, Inc., Baltimore, Md. He will also handle Purr cat food sales in the eastern division.

Curt Aagre has joined Connell Rice & Sugar Co., Inc., Westfield, N. J., as sales manager—sugar.

Walter M. Greenspan, formerly of Global Frozen Foods Co., New York City, has joined Wakefern Food Corp. of New Jersey as a private label buyer.

Carl W. Kouba and **Donald F. Larsen, Jr.** have been named vice presidents of the Larsen Co., Green Bay, Wis. They will also serve on the company's board of directors.

Nicholas J. Simon has been appointed sales training manager of McCormick & Co., Inc., Baltimore, Md.

Leon A. Miller, president of General Foods, has been elected chairman of a newly formed association — Grocery Products Manufacturers of Canada. **J. G. Wharry,** president of Quaker Oats, was elected vice president.

H. C. Bush has been elected president of Bush Bros. & Co., canned food packers, Dandridge, Tenn. **S. B. Bush**

was elected vice president, sec.-treas.; **Jack T. Bush,** vice president, factory superintendent; and **C. J. Ethier,** vice president, sales manager.

Frederick A. Stare of Columbus, Wis., has been chosen as the recipient of the Forty-Niner Service Award for 1960.

W. B. Murphy, president of Campbell Soup Co., Camden, N. J., has been elected chairman of the board of Crusade for Freedom, a non-profit organization supporting Radio Free Europe.

A. J. Thurman has been named director of sales for Snow Crop div., Minute Maid Corp., Orlando Fla.

David V. Whitley has been named general sales manager of the frozen foods div., Libby, McNeill & Libby, Chicago, Ill. **Arthur S. Zachman** has been appointed administrative assistant to the vice president of the frozen foods division and **Carl N. Plattner** has been named manager of the tomato products department. **M. T. McEvoy** has been appointed general manager of the firm's Florida Citrus Operation with headquarters in Ocala.

Obituaries

Mrs. Ruth Wilder, wife of W. W. Wilder, past president of National Kraut Packers Assn., of Clyde, Ohio, died recently.

Charles Sherman Anger, retired eastern sales manager of H. J. Heinz Co., died recently of a heart attack at his home in Mount Lebanon, Pa.

Clarence Edward Spooner, 69, a former general manager of Canadian Food Products Ltd., died recently. Since his retirement in 1951, he had been an advisor to Langley Harris and Co., Ltd., importers.

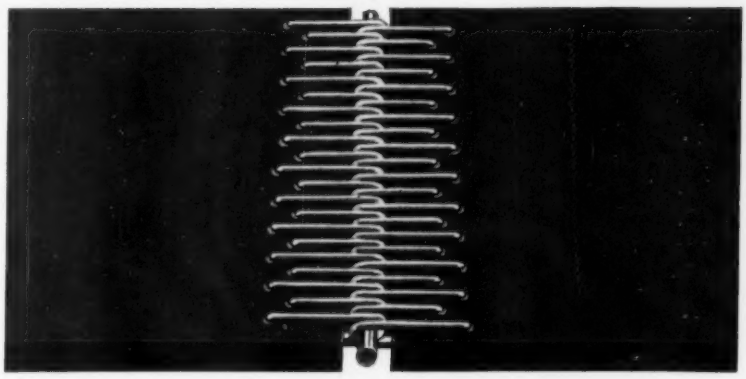
Salvatore Viviano, 82, 'Spaghetti King,' died recently in his home in Coral Gables, Fla. Mr. Viviano was the owner of Vimco Macaroni Products Co., Carnegie, Pa.

George Van Voorst, 54, president of the Rutherford Foods Corp., Kansas City, Mo., died recently.

Dr. Ralph Everett Lee, 83, retired director of the department of applied research, Standard Brands, Inc., New York City, died recently. Dr. Lee's services included work with the predecessor of U. S. Food & Drug Administration, and with Fleischmann Co., which later eventually became part of Standard Brands. He was noted for his interest in the B vitamins, and for the part he played in U. S. flour enrichment.

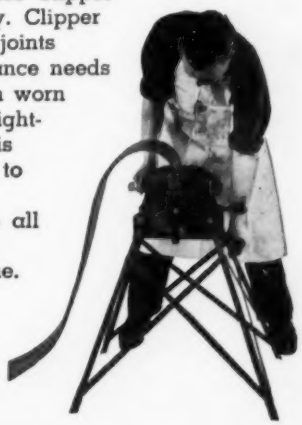
Clipper

HOOKS and LACERS save money 2 ways



Make replacement less frequent — speed replacement when needed

Clipper machine-lacing installs Clipper Belt Hooks under great pressure quickly and easily. Once Clipper belt hooks are inserted, they're in to stay. Clipper machine-laced joints outlast other belt joints several times over — slashing maintenance needs and unproductive downtime. And when worn belts must be replaced or slack belts tightened, the Clipper machine method is faster than other methods. Exerting up to 45,000 pounds pressure, Clipper Belt Lacers lace belts up to 12 inches wide all in one operation, again slashing maintenance time and unproductive downtime.



FOR MORE INFORMATION

Detailed product information and case history examples of Clipper machine-lacing benefits are contained in Bulletin No. 157. Send for your free copy today.

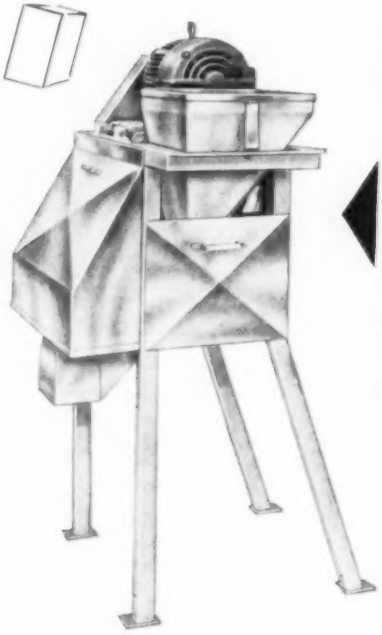
Ask your Industrial Distributor for Clipper Products

Clipper BELT LACER COMPANY

994 Front Ave., N. W. Grand Rapids 2, Michigan

Versatility

is the big word for the Urschel Model **RA DICER, STRIP-CUTTER AND SLICER**



For Pickles, Vegetables, Fruits, Candied Fruits, Fruit Peel

The New Urschel Model **"RA" Dicer, Strip-Cutter and Slicer** gives you these *new* advantages: *widest range of cuts– from relish sizes of 1/16" x 1/8" x 1/8" to full 3/8" cubes, strip-cuts and slices ▶ more perfect dices than ever before ▶ operating speeds are quickly changed to provide the best dicing efficiency for various products and size cuts desired – means maximum capacity and higher quality cuts ▶ saves your valuable process syrups ▶ no product crushing – all the juice is locked in ▶ plugging is avoided by more direct product transfer from slicing to dicing knives ▶ stainless steel product contact surfaces ▶ one motor instead of two – mounted above operating parts for complete protection ▶ capacity up to 10,000 lbs. per hour*

The new "RA" Dicer replaces the model "R" unit in the Urschel line

Write today. Complete information promptly on request.

URSCHEL LABORATORIES INC.
VALPARAISO INDIANA

Designers and manufacturers of precision, high speed cutting equipment for food products

Color wrapped up for keeps

Now your Sefton Wraps will never lose the realistic beauty of nature's own colors. Muirson captures that true depth and intensity—then protects it with Tuff-Coat®. This exclusive finish positively resists frost, moisture transfer, scuffing. Investigate Muirson Sefton Wraps now. Wrap up your product's full appeal—for keeps!

This page was prepared in its entirety by Muirson Label Co., Inc.—San Jose, Calif.; Peoria, Ill.; and Meriden, Conn.

because MUIRSON specializes in LABELS

RAW PRODUCTS

Selecting Potatoes For Processing

First choose 8 lbs. of potatoes from the lot which you want to test. If these potatoes are in bulk, select them from various parts of the bin or pile. If they are in containers, select one or two tubers from each container. Don't pick very small or very large tubers. If necessary, one of the potatoes may be cut to get exactly 8 lbs. Potatoes should be dry and free from dirt.

Next, place the 8 lbs. of potatoes in a wire basket. Attach the hook of the bulb to the wire loop in the center of the basket and lower the entire basket, potatoes and bulb into a container of water. A deep ash can makes a good container.

Readings of specific gravity or per cent dry matter should be made as soon as the hydrometer comes to rest floating in the water. Not more than one or two minutes should elapse before the reading is made. The higher the reading or the deeper the instrument sinks, the more mealy the potatoes are and therefore more desirable for baking, chipping or French frying.

—Bulletin 583, Factors Affecting the Specific Gravity of the White Potato in Maine, by H. J. Murphy, associate agronomist, and M. J. Goven, technical assistant, Maine Agricultural Experiment Station.

Conversion Table for Specific Gravity of Potato Tubers to Content of Starch and Dry Matter—Per Cent

Specific Gravity	Starch %	Dry Matter %	Specific Gravity	Starch %	Dry Matter %
1.050	7.85	13.88	1.081	14.02	20.43
1.051	8.05	14.09	1.082	14.22	20.64
1.052	8.25	14.31	1.083	14.42	20.85
1.053	8.45	14.52	1.084	14.62	21.06
1.054	8.65	14.73	1.085	14.82	21.27
1.055	8.85	14.94	1.086	15.02	21.48
1.056	9.04	15.15	1.087	15.22	21.69
1.057	9.24	15.38	1.088	15.41	21.90
1.058	9.44	15.57	1.089	15.61	22.11
1.059	9.64	15.78	1.090	15.81	22.33
1.060	9.84	15.99	1.091	16.01	22.54
1.061	10.04	16.21	1.092	16.20	22.75
1.062	10.24	16.42	1.093	16.41	22.96
1.063	10.44	16.63	1.094	16.61	23.17
1.064	10.64	16.84	1.095	16.81	23.38
1.065	10.84	17.05	1.096	17.01	23.59
1.066	11.04	17.26	1.097	17.21	23.80
1.067	11.23	17.47	1.098	17.41	24.01
1.068	11.43	17.68	1.099	17.60	24.22
1.069	11.63	17.89	1.100	17.80	24.44
1.070	11.83	18.10	1.101	18.00	24.65
1.071	12.03	18.32	1.102	18.20	24.86
1.072	12.23	18.53	1.103	18.40	25.07
1.073	12.43	18.74	1.104	18.60	25.28
1.074	12.63	18.95	1.105	18.80	25.49
1.075	12.83	19.16	1.106	19.00	25.70
1.076	13.03	19.37	1.107	19.20	25.91
1.077	13.22	19.58	1.108	19.40	26.12
1.078	13.42	19.79	1.109	19.60	26.34
1.079	13.62	20.00	1.110	19.79	26.55
1.080	13.82	20.21	1.111	19.99	26.76

(Calculated from Von Scheele Equations: % starch = 17.564 + 199.07 (Sp. Gr.—1.0988); % dry matter = 24.182 + 211.04 (Sp. Gr.—1.0988).

Mechanical Prune Harvester Has Self-Propelled Frames

A new machine for mechanical harvesting of prunes shakes the trees mechanically and catches the fruit on frames. The frames are self-propelled; two are required for the harvesting of one tree. They are designed so that they do not interfere with the shaking of the trees. The bed of the catch frame is actually a large conveyor belt which moves the fruit into boxes.

A series of nylon strips are stretched over the conveyor to prevent fruit from falling on fruit. They cushion the fall of the fruit and allow it to roll gently onto the conveyor.

The machine can handle about 30 trees per hour. It has been tested on other fruits and shows promise on cling peaches and apricots, but not too much for pears.

—Food Processing Review, Oregon State College, Corvallis, Ore.

Calif. Scientist Gets AAAS-Campbell Award

The AAAS-Campbell Award for Vegetable Research has been given to Dr. Charles M. Rick of the University of California, Davis. The award was presented at the American Assn., for the Advancement of Science meeting in Chicago, Dec. 28.

The award, established two years ago by the Campbell Soup Co., consists of $1,500 and a bronze medal. It is given for an outstanding single research contribution, of either fundamental significance, for the production of vegetables, including mushrooms, for processing. Dr. Rick was chosen for his contribution to basic research in cytogenetics and evolution of tomato involving both cultivated and wild forms.

Too Much Salt Has Bad Effect on Soil

Waste water from food processing industries can supply plenty of nutrients when it is used for crop irrigation. But it can also ruin the soil if it contains too much salt.

The effluent—waste material after it is treated to remove most of the organic matter and solids—puts large amounts of important plant growth elements into the soil. Crops growing on soil treated with effluent give excellent yields.

An excess of salt in the effluent could have a very bad effect on the soil and on the ground water. There is no immediate change as the sodium replaces calcium and magnesium on the soil particles.

Soils high in sodium content tend to fall apart when they're washed with rain water. Particles which are normally arranged in clusters all flatten out. The soil becomes compact in a clay pan which keeps water from penetrating it.

Processing plants can keep a large amount of salt out of the effluent by emptying curing and brining vats into the regular sewage system rather than into the irrigation system.

—H. A. Vollbrecht and L. E. Engelbert, soil scientists, University of Wisconsin, Madison, Wis.

MOVE IT

in DI-CEL cartons

A wide variety of bakery items—cakes, cookies, biscuits, sweet rolls—reach the retail store in undamaged condition when packed in CCA's unique new carton. Its name: DI-CEL®. Because of its cushioning cell structure DI-CEL prevents rolling (and breaking) of baked goods in transit. Results: fewer markdowns because of spoilage, greater acceptance of your product by retailers and customers alike. To pack it—move it—sell it is the business of CCA packaging.

CONTAINER CORPORATION OF AMERICA

CCA

Chicago 3...and all key marketing areas. Folding Cartons, Shipping Containers, Sefton Fibre Cans, Molded Plastic Products

NEW PRODUCTS AND PACKAGES

Butter Flavor

Adams Extract Co., Austin, Texas, has introduced an Imitation Butter Flavor. It is packed in ½ oz. and 1½ oz. glass bottles, and is recommended for use with cake mixes, cakes, pancakes, instant puddings, rolls, rice oatmeal, popcorn, and other foods. Bottles are supplied by Owens-Illinois Glass Co., Toledo, Ohio; cartons by Container Corp. of America, Arlington, Texas, and Lengsfield Bros., New

Orleans, La.; screw-top closures by Crown Cork and Seal Co., Inc., Baltimore, Md., and Anchor-Hocking Glass Corp., Lancaster, Ohio; and labels by Joe K. Alexander, Austin, Texas.

Fruits & Vegetables

Richmond-Chase Co., San Jose, Calif., has introduced a line of fruits and vegetables under its re-designed Quality Inn label. The labels have a

red and white background with natural color vignettes of the product packed. They were designed and produced by Muirson Label Co., Meriden, Conn.

Prepared Foods

Dorann Foods, Inc., Rye, N. Y., is packaging two new frozen prepared foods—Dorann Potatoes Au Gratin and Spanish Souffle'. The package design portrays the product as it would

appear on the consumers table ready to be eaten. The packages were designed and produced by Marathon a division of American Can Co., Menasha, Wis.

Precooked Dinners

Red L Foods Corp., Great Neck, Long Island, N. Y., has introduced two new precooked dinners—French Fried Shrimp and French Fried Scallop. Both dinners come with whipped potatoes au gratin. The shrimp dinner has green peas and butter, and the scallop dinner, green beans and butter. Both

are packaged in positive locking, tamperproof, Marathon Marapaks. The printing is offset lithography and the finish is Marathon Glamakote. Marathon, a division of American Can Co., Menasha, Wis., produced the packages at its Oswego, N. Y., plant.

Multipack

Libby, McNeill & Libby, Chicago, Ill., for the first time this summer, will merchandise its frozen lemonade concentrate in a multipack. Called

Wrapak, the six-can carton was designed by Container Corp. of America and produced at its Greensboro, N. C., plant. The design of the cans is carried through on the pack.

Cream Pies

Topco Associates, Inc., Chicago, Ill., has added three new cream pies to its Top Frost frozen pie line. Fillings are flavored with Dutch chocolate, pure lemon juice and fresh frozen

strawberries, sandwiched between a graham cracker crust (new in cream pie field) and whipped cream. They are packaged in glamakote-finished printed cartons.

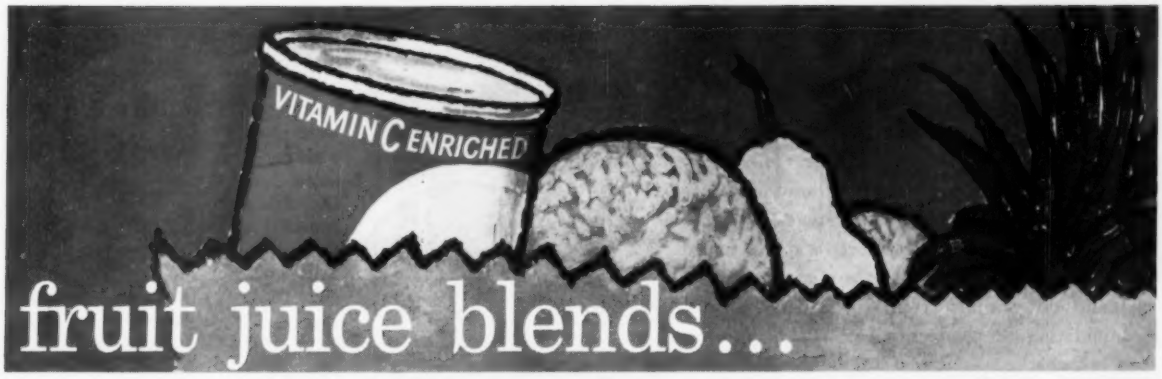
Fruit Juice

Bowman Apple Products Co., Inc., Mount Jackson, Va., is introducing a new fruit juice drink—PrunApple. It is a combination of apple juice and concentrated prune juice. No water is

added. The juice is packed in crystal glass juice bottles, sealed with a pry-off style vacuum closure. Caps are supplied by White Cap Co., Chicago, Ill.; wrap-around labels by Piedmont Label Co., Bedford, Va.; and glass bottles by Anchor Hocking Glass Corp., Lancaster, Ohio.

Instant Corn

Martin H. Cope Co., Rheems, Pa., has introduced dried corn in instant



enriched with vitamin C

● Today's health-conscious shopper invariably chooses the brand that offers the benefits of vitamin fortification for her family.

The words "Enriched with Vitamin C" have real value on the label of your fruit juice blends. Especially when you consider that this sure-fire sales feature costs just a fraction of a cent per unit. It provides a truly low-cost way to keep your sales up high.

Pfizer, a leading producer of vitamins for 20 years, supplies vitamin C (ascorbic acid) in convenient, easy-to-handle forms. Pfizer Ascorbic Acid protects your fruit juices against the color and flavor fading that often occurs during a product's shelf life.

Other Pfizer products—Citric Acid and Sodium Citrate—insure the true fruit tanginess of canned fruit juice blends.

Write today for full details.

Science for the world's well-being

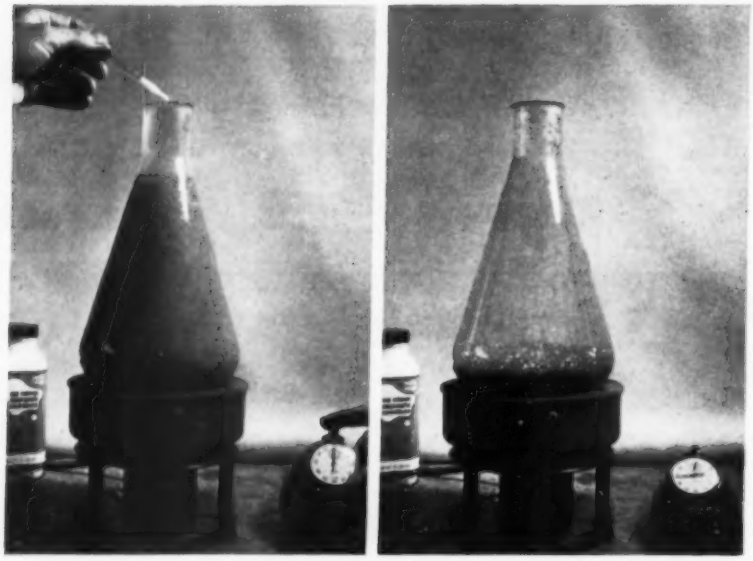
Pfizer

Quality Ingredients for the Food Industry for Over a Century

Chas. Pfizer & Co., Inc., Chemical Sales Div., 630 Flushing Ave., Bklyn. 6, N.Y. Branch Offices: Clifton, N.J.; Chicago, Ill.; San Francisco, Cal.; Vernon, Cal.; Atlanta, Ga.; Dallas, Tex.; Montreal, Can.

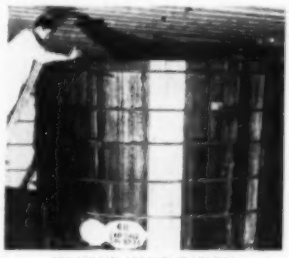
SILICONE NEWS from Dow Corning

Stop Foam Fast



Dow Corning Silicone Defoamers Increase Production, Cut Costs

You can't beat Dow Corning silicone defoamers for foam control. Job-proved to be the fastest, most efficient and effective foam killers ever developed, Dow Corning defoamers speed processing time, reduce product waste, minimize maintenance and eliminate the chance of boil-overs and fire hazards.

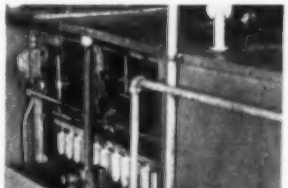


IN WINE FERMENTATION

Easy-to-use Dow Corning silicone defoamers eliminate troublesome foam in the processing and packaging of foods, beverages, syrups and antibiotics. Highly effective at low concentrations, they knock down a mountain of foam and minimize recurrence, without contaminating the product.

Odorless, tasteless and physiologically harmless, Dow Corning Antifoam A may be used in nonstandard foods at concentrations up to 10 ppm; water-dilutable Antifoam AF Emulsion may be used at concentrations to 34 ppm.

Write for a FREE SAMPLE giving an indication of your foaming problem and whether it's in an aqueous or oil system. Address Dept. 4402.



IN PROCESSING FROZEN BARS

first in silicones

Dow Corning CORPORATION

MIDLAND, MICHIGAN

ATLANTA BOSTON CHICAGO CLEVELAND DALLAS LOS ANGELES NEW YORK WASHINGTON, D. C.

form. This new "Dutch Delight" dried white sweet corn may be cooked and served, from package to table, in a few minutes. The corn is packaged in 8 or 16 oz. packages and contains no salt, sugar or preservatives.

New Package Briefs

Lard Package: Peters Packing Co., Inc., Chippewa Falls, Wis., is packaging its lard in glassine-lined cylindrical containers manufactured by Sealright Co., Inc., Fulton, N. Y.

Spaghetti Label: H. J. Heinz Co., Pittsburgh, Pa., has redesigned the labels for its spaghetti and macaroni lines. The new labels feature the national colors of Italy and a crest showing the Italian influence.

Cellophane Overwrap for Steaks: Biff Steaks, Inc., Canton, Ohio, is using a new cellophane overwrap for its frozen steaks. Overwraps were printed by Milprint, Inc., Milwaukee, Wis.

Tomato Juice Decanter: P. J. Ritter Co., Bridgeton, N. J., has adopted a rounded square decanter for both its tomato juice and Veg-Crest vegetable juice cocktail. Glass jar by Armstrong Cork Co., Lancaster, Pa.; caps by White Cap Co., Chicago, Ill.; Cel-O-Seal neck band is manufactured by Du Pont, Wilmington, Dela., and supplied by Armstrong.

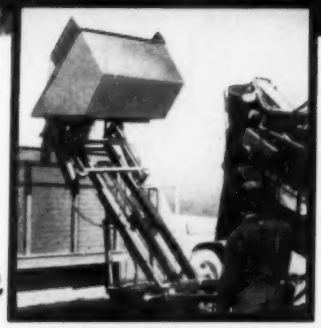
Relish in Wide-Mouth Jar: P. J. Ritter Co., Bridgeton, N. J., is using a new wide-mouth, straight-lined jar for packaging its relish. Glass jars are supplied by Armstrong Cork Co., Lancaster, Pa.; labels, Reynolds Metals Co., Richmond, Va.; caps, White Cap Co., Chicago, Ill.

Pizza Pie Gets Pictorial Carton: Francois Pope & Sons Foods, Inc., Chicago, Ill., is marketing its Pizza Pie in a new litho printed carton which portrays the pie. The 15 oz. carton, of Marapak construction with a Marathon Hi-Fi Glamakote, is manufactured by Marathon, a div. of American Can Co., Menasha, Wis.

Combine Peas and Lima Beans PROFITABLY...

with the Scott Improved Pea and Bean Combine

Threshes tender peas and limas thoroughly, cleanly with only one operator. The high capacity and drastic labor reduction enables this Combine to pay for itself in a short time from the reduction of labor alone. The same acreage can be handled faster with less equipment. This new Combine does not cost — it pays!

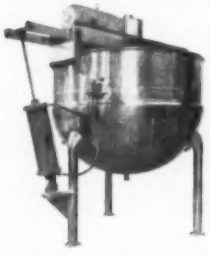


The new Scott Hydraulic, Bulk Handling Dump Hopper completes the dumping cycle in less than 2 minutes. The large capacity (1400 to 1800 lbs. peas) eliminates the need for trucks entering the field in most cases.

Larger hoppers are available for sweet corn and other products.

THE Scott Viner COMPANY

1224 KINNEAR ROAD, COLUMBUS 8, OHIO

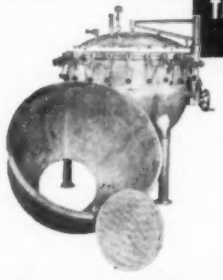


STYLE SA MIX COOKER Standard SA Mix Cooker has either single motion or double motion agitator with or without hydraulic lift. With hydraulic lift agitator lifts easily and smoothly out of cooker. Sizes range from 30 to 500 gallons.

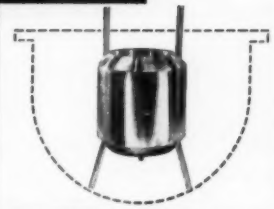
STYLE CW MIX COOKER Large diameter gives fast even cooking. Hydraulic Lift tilts agitator smoothly and easily out of tilting kettle. Available for 40, 90, 120 pounds steam working pressure.

STYLE CW Designed to process large batches up to 150 gallons. Positive worm gear and handwheel give complete control of large capacity loads while tilting. Large diameter kettle gives fast, even cooking. Sizes from 30 to 150 gallons.

THERE IS MORE IN HAMILTON KETTLES THAN MEETS THE EYE



STYLE PC Stainless steel pressure cooking kettle, designed especially for meat and poultry processing. Balloon jacket gives increased heating capacity. Built for 90 p.s.i. in jacket and 15 p.s.i. in kettle. Has quick opening latches. Top is lifted by eccentric lever. Sizes 30 to 250 gallons.



CIRCULATOR Stainless steel steam immersion heating unit can be installed in any kettle regardless of size or shape. Gives extra heating surface at the center of kettle. Creates thermal agitation. Speeds up cooking 45%.

Hamilton Equipment Influences Profits Because Of Low Costs . . . Long Life

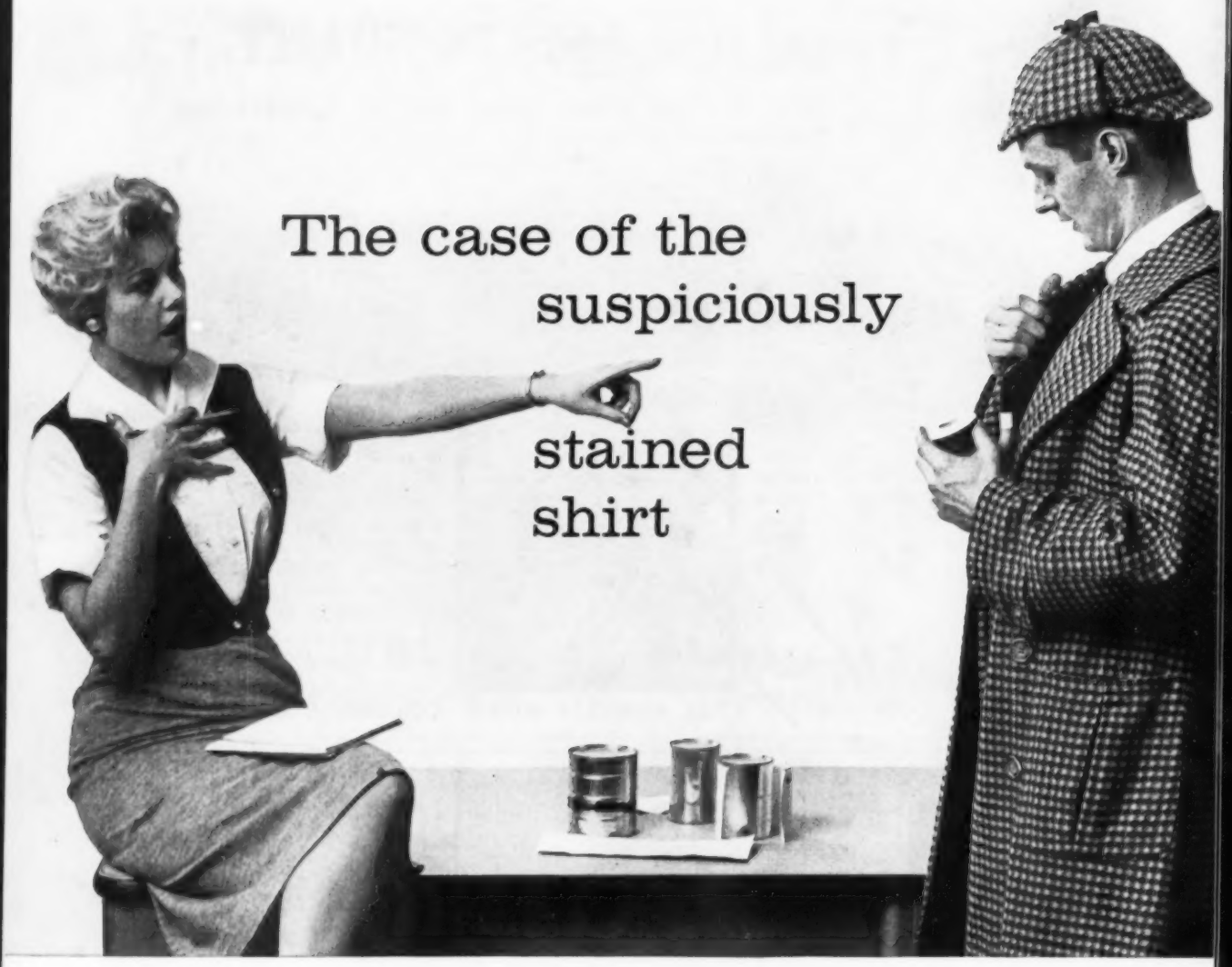
For Mixing and Cooking, specify Hamilton Stainless Steel Kettles. They are efficient, designed for easy cleaning, and precision-built to operate at low cost. Write for catalogue illustrating conventional and steam-jacketed kettles with or without agitators.

ESTABLISHED 1876

HAMILTON Kettles

DIVISION OF BRIGHTON CORP.

820 STATE AVENUE CINCINNATI 4, OHIO



MISS WATSON: Where have you been all day, Fearless? I've had several calls for you.

FEARLESS FULLER: I became involved in a very interesting case and the time just flew by.

MISS WATSON: I can imagine, if that lipstick stain on your collar is any indication!

FEARLESS FULLER: Hush your suspicions, Miss Watson. That stain happens to be cranberry juice.

MISS WATSON: Cranberry juice?

FEARLESS FULLER: Yes. It seems one of the local cranberry canners was using an adhesive other than Fuller's and had trouble with his labels sticking.

MISS WATSON: I trust you solved the problem.

FEARLESS FULLER: Naturally. After much investigation, I recommended switching to one of our Fuller adhesives. For positive, trouble-free labeling at any can temperature you can't beat Fuller's.

MISS WATSON: Yes, but that still doesn't explain that stain on your shirt collar.

FEARLESS FULLER: It does if you remember what Fuller men are noted for.

MISS WATSON: Shirtsleeve service?

FEARLESS FULLER: That's right. We at Fuller aren't afraid to roll up our sleeves and pitch right in until a problem is solved. We use our hands as well as our heads.

MISS WATSON: Oh, you're marvelous at solving these cases, Fearless. I'll bet your pipe even contains a thinking man's filter.

FEARLESS FULLER: No, Miss Watson, it's just that a Fuller man always knows the solution to adhesive problems.

Your Fuller man is ready with the correct solutions on any adhesive problems for you, too. Contact your near by plant.

H. B. Fuller Co.

INDUSTRIAL ADHESIVES

St. Paul, Minnesota

St. Paul, Minn. • Atlanta, Ga. • Buffalo, N.Y. • Chicago, Ill. • Cincinnati, Ohio
Dallas, Tex. • Kansas City, Mo. • Linden, N.J. • Los Angeles, Calif. • Memphis, Tenn. • Portland, Ore. • So. San Francisco, Calif. • Tampa, Fla.
Also Winnipeg, Can. • Fuller Adhesives International, Nassau, Bahamas

The Cranberry Incident Shows Need for New Law

In the recent cranberry scare, the major part of a year's production was jeopardized by government action. This particular incident has shaken the confidence of many segments of the food industry in the enforcement of the new 1958 Food Additives law.

Many innocent people have been hurt by the Food and Drug Administration press announcement that part of the 1959 crop was contaminated with a cancer producing chemical.

FDA had no choice in the matter. Under the law, any amount of added cancer-forming material is illegal. "Any amount" is interpreted as a quantity measurable by present analytical methods.

There is a practical difference between absolute zero as required by the law and an insignificant low level which is acceptable to qualified experts in the field of technology.

—Dr. L. C. Clifcorn, National Can Co., at the Ohio Canners and Food Processors Assn. convention.

Fifth of March Deadline Will Pose Many Problems

When the 1958 food additives amendment to the U. S. Food, Drug & Cosmetic Act becomes effective on March 5, 1960, the deadline will bring with it many problems, both for government officials who have to administer the law and for industry which has to live by it. Some of them may be summarized as follows:

- Who is an expert? Selection of "safe" additives is currently in the hands of a board of 800 scientists and technologists, drawn from many fields. Only a handful may be expert on a given substance, but the material must be cleared by the group as a whole before it can be used, government spokesmen say.
- What is "food grade"? Additives which have been cleared are said to be "assumed to be of food grade," but few materials have specifications for such a grade.
- What additives are "safe"? Two lists have so far been published—the original "white list" in December of 1958 (see Canner/Packer for January, 1959), and the revised list put out in November, 1959 (see Fed. Register for Nov. 20). The second is similar to the first, but excludes carbon black, charcoal, oleic acid, linoleic acid, titanium dioxide and ultramarine blue.
- How about a time extension? The law provides that in some instances a substance may be used for another year, provided no health hazards are involved. While food packers may expect a good deal of relief here, present thinking in the government seems to be that very few 12-extensions will be permitted.
- What about usage? Sodium nitrite has long been used as an additive in meat products, but not for fish. Misuse of additives which may be satisfactory in one environment and not in another will be a continuing problem.
- What developments are likely for the future? There is sentiment for a change in labeling practices—use of better-understood terms in place of highly-technical words which may be meaningless to most consumers. There is interest in forming a group to be concerned with food safety—an organization which would educate both the public and industry.

—Paraphrase of address by Dr. Bernard L. Oser, Food & Drug Research Laboratories, New York City, at Nor. Calif. IFT annual meeting, Berkeley, Calif., Dec. 3, 1959.

Reducing Canned Asparagus Damage During Shipment

The tips of asparagus spears often are damaged during shipment. Canners have blamed their processing for this trouble, and also have been of the opinion that the pack should always be stored butts down.

Recent tests indicate that those who have felt this way have been wrong on both counts. Asparagus travels better, we find, when it is shipped tips down. And the damage to tips results, not from over-processing, but from sudden shocks en route.

—Charles Townsend, Natl. Canners Assn., Berkeley, Calif., at N.W. Canners & Freezers Assn. convention, Seattle, Wash., January 1960.

Short Course Calendar

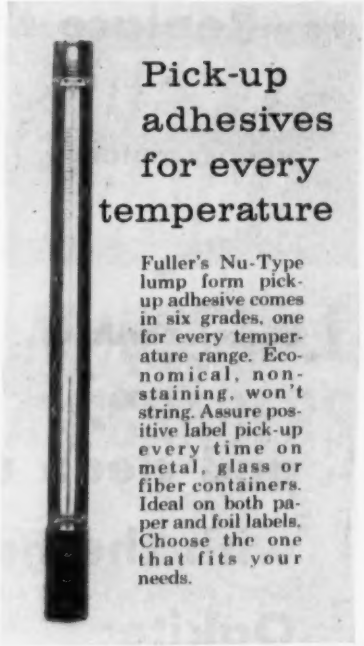
CANNER/PACKER recently sent out questionnaires requesting dates of short courses. From the replies we have compiled a calendar which lists short courses and raw product conferences that will be held throughout the year. Additions will be made as new courses are announced.

January dates are being listed this month to make a complete record for the year.

Jan. 6-8: Insecticide and Pesticide Conference, University of Wisconsin, Madison.

Jan. 7: Cherry Production and Distribution, Wisconsin Cherry Growers Assn., Madison, Wis.

Jan. 9: Cranberry Production and Dis-


Pick-up adhesives for every temperature
Fuller's Nu-Type lump form pick-up adhesive comes in six grades, one for every temperature range. Economical, non-staining, won't string. Assure positive label pick-up every time on metal, glass or fiber containers. Ideal on both paper and foil labels. Choose the one that fits your needs.
COLD, SWEATY CANS— Use Grade Super RX at *low* temperature.
COLD CANS — Use Grade R. For cans where temperatures range from 35° to 60° F.
NORMAL CANS — Use Grade S. Recommended for labeling cans with *normal* temperature range between 50° to 90° F.
WARM CANS — Use Grade T. For cans ranging in temperature from 70° to 110° F.
HOT CANS — Use Grade TXM. Designed for cans where temperatures vary from 100° to 140° F.
VARIABLE CANS — Use Grade XX. A versatile adhesive for use in the temperature range of 60° to 130° F.
H.B. Fuller Co.
INDUSTRIAL ADHESIVES
St. Paul, Minn.

Replace them all

pumps, motors

ladders

buckets, brushes

and clean up faster with the new Oakite SANISEPTOR

So much faster that a brewery reports the unit paying for itself in one day's use...a meat packer figures each hour's use of the Oakite SANISEPTOR saves him $1.60...a food packer states his maintenance cleaning time has been cut "just about in half."

Not only faster, but better, too, because the cleansing jet-stream from the Oakite SANISEPTOR can reach places where brushes and mops can't – way up, behind and under equipment, in narrow crevices and tight corners.

Mechanized cleaning couldn't be simpler. Just load the SANISEPTOR with Oakite detergent, connect to any hot-water outlet and turn a valve. You get a jet of hot detergent solution to knock loose the toughest soils. Turn another valve to rinse. No pump, motor or steam supply needed because the Oakite SANISEPTOR operates on your own line pressure. Weighs only 25 lbs., stands only 21 inches high, easily portable from job to job. Use it everywhere – on conveyors, holding tanks, vats, equipment, floors, walls. For more details, write to Oakite Products, Inc., 26G Rector Street, New York 6, N.Y.

OAKITE

50 1909-1959 SCIENCE

years' leadership in industrial cleaning

Technical Service Representatives in Principal Cities of U. S. and Canada

tribution, Wisconsin Cranberry Growers Assn., Wisconsin Rapids, Wis.

Jan. 12-13: Short Course on Food Sanitation, Iowa State University, Ames, Ia.

Jan. 16: Tomato Day, University of Calif., Davis.

Jan. 28-29: Dairy Mfrs. Short Course, University of Wisconsin, Madison.

Feb. 1-3: Fieldmen's Conference, Pennsylvania Canners Assn., Nittany Lion Inn, University Park, Pa.

Feb. 1-5: Double-Seamer Course, American Can Co., Oregon State College, Food Tech. Bldg., Corvallis.

Feb. 3-4: Food Processors Short Course, OSU and Ohio Canners & Food Processors Assn., Pick-Fort Hayes Hotel, Columbus, Ohio.

Feb. 6: Prune Day, University of Calif., Davis.

Feb. 8-12: Food Processors Short Course, Oregon State College, Dept. of Food and Dairy Tech., Corvallis.

Feb. 8-May 20: Fundamentals of Food Technology, City College, New York City.

Feb. 9-10: 35th Annual Raw Products Conference, N. Y. State Canners & Freezers Assn., Syracuse University and Experiment Station, Seneca Hotel, Geneva, N. Y.

Feb. 9-11: Raw Products Conference, Wisconsin Canners Assn., Wisconsin Center Bldg., Madison.

Feb. 11: Tomatoes, University of Maryland, Student Union Bldg. and Dept. of Horticulture, College, Park.

Feb. 11-12: Raw Products Conference, Purdue University, Lafayette, Ind.

Feb. 15-19: Double-Seamer Course, Continental Can Co., Oregon State College, Food Tech. Bldg., Corvallis.

Feb. 17-18: 11th Annual Perishable Loss Prevention Short Course, Ore. State College, U. of Idaho, Washington State U., and Amer. Railway Develop. Assn., Medford Hotel, Medford, Ore.

Feb. 18: Sweet Corn, University of Maryland, Student Union Bldg. and Dept. of Horticulture, College Park, Md.

Feb. 23: Strawberry Day, Oregon State College, Food Tech. Bldg., Corvallis.

Feb. 25: Snap Beans, University of Maryland, Student Union Bldg. and Dept. of Horticulture, College Park.

Mar. (date not set): Introduction to Microbiological Techniques for the Freezing Industry (10 day course), University of Calif., Davis.

Mar. 3-4: Canners' Workshop, Pennsylvania Canners Assn., Allenberry Lodge, Boiling Springs, Pa.

Mar. 3-4: Better Foods for Better Nutrition Conference, University of Georgia, Center for Continuing Education, Athens.

Mar. 19: Olive Day, University of Calif., Davis.

Mar. 21-25: Food Science Short Course, Oregon State College, Food Tech. Bldg., Corvallis.

Mar. 21-Apr. 1: Industrial Packaging Short Course, Purdue University, Lafayette, Ind.

Mar. 22-23: Canners Quality Control Conference, University of Wisconsin, Madison.

Apr. 6: Apple Products, University of Maryland, Student Union Bldg. and Dept. of Horticulture, College Park.

Apr. 11-13: Transportation of Perishables Conference, University of California, Davis.

May 20: Vegetable Crops Field Day, University of Calif., Davis.

Nov. 10-12: Conference on Horticultural

Crops, Wisconsin State Horticultural Society.

Men in the News

Dr. Herman O. L. Fischer, professor emeritus of biochemistry at University of California, Berkeley, has been honored by Justus Liebig University, Germany, with the degree of doctor of sciences, in recognition of his work in carbohydrates and fats.

D. F. Meigh, research official of British Agricultural Research Council, in mid-February will conclude a U.S. visit which has taken him to government laboratories and schools of agriculture and food technology on both American coasts.

Claude E. Hynds has been named acting director of the State Food Laboratory in the New York State Department of Agriculture and Markets. Mr. Hynds succeeds Dr. A. H. Robertson who is retiring after nearly 30 years in the position.

Grade Standards

Grade standards developed by the U. S. Department of Agriculture are voluntary. Comments regarding standards and requests for copies of standards may be sent to and obtained from: Chief, Processed Products Standardization and Inspection Branch, Fruit and Vegetable Div., Agricultural Marketing Service, U. S. Department of Agriculture, Washington 25, D. C.

New Grade Standards for:

Canned Ripe Olives
Sugarcane Molasses
Dehydrated, Low Moisture Peaches (First Issue)

Standards of Identity

The Food and Drug Administration establishes standards which are binding to every processor. Comments on proposed changes may be sent in quintuplicate to: Hearing Clerk, Department of Health, Room 5440, Health, Education and Welfare Building, 330 Independence Ave., S. W., Washington 25, D. C.

Proposed Changes to Standards for:

Cereal Flours and Related Products

Bureau Reports Change in Address

The Bureau of Commercial Fisheries Technological Laboratory will be located in new and larger quarters at Emerson Ave., Gloucester, Mass.

The bureau was previously located at 61 Sumner St., East Boston, Mass.

CRCO* DOES IT AGAIN!

*SAY "SEE-AR-CO"

NEW CRCO ADJUSTABLE BAR TYPE BEAN GRADERS

CRCO SINGLE GRADER

One Grader Adjusts to Grade All Sizes from #1 to #7

Cylinders Fit CRCO Pocket Type Frames in Field

- Available in single or double models
- "Flow Control" adjustable Feed Hopper
- Longer life with low maintenance
- Can be fitted to grade special sizes

Write for Detailed Bulletin.

THE BEST OF Everything

CHISHOLM-RYDER CO. INC.
Niagara Falls, New York
FOR THE FOOD PROCESSOR

Crown's two strategically-located new plants and increased can manufacturing facilities in existing plants are all Task-Designed to give you better service for your frozen concentrate, fruit, vegetable and juice cans.

All Crown cans are Task-Designed to meet rigid quality control tests and to satisfy your own strict requirements.

May we have the opportunity of presenting you with more details?

CROWN

for cans · crowns · closures · machinery

CROWN CORK & SEAL CO., INC., 9300 Ashton Rd., Philadelphia 36, Pa.

ASSOCIATION ACTIVITIES

Brokers Elect Officers At Annual Conference

The National Food Brokers Assn. elected new officers at its annual food sales conference in Chicago, Ill., Dec. 12-16.

H. G. Alexander

Hugh G. Alexander, Jr., Alexander - Spaulding Co., Houston, Texas, was elected national chairman. Other officers include: George C. Cook, Harry B. Cook Co., Baltimore, Md., 1st vice chairman; R. L. Fitzwater, Jr., R. L. Fitzwater & Associates, Camden, N. J., 2nd vice chairman; J. E. Raley, Jr., Raley Brothers, Inc., Atlanta, Ga., 3rd vice chairman; R. S. Prewitt, McElroy & Prewitt Co., Des Moines, Ia., member-at-large on the executive committee; and H. Wayne Clarke, Walter Leaman Co., Washington, D. C., treasurer.

The members of the executive committee will include Messrs. Alexander, Cook, Fitzwater, Prewitt and the following former national chairmen: Arthur G. Curren (1959), Sloan McCrea (1958); and George E. Dillworth (1957).

Tri-State Packers Elect New Officers

James R. Shilling of Hampstead, Md., has been elected president of the Tri-State Packers' Assn. He succeeds Francis C. Stokes, Jr. of Vincentown, N. J.

R. Lee Mitchell of Kennedyville, Md,. and Charles K. Lane of Swedesboro, N. J., were elected vice presidents.

The new district governors are William Kiefer, Hollywood, Va.; John E. Chenoweth, Westminster, Md.; William J. Scheffer, Seabrook, N. J.; and Richard Fiorilli, Vineland, N. J.

NAFFP Plans for 1960

The National Assn. of Frozen Food Packers announced that its 19th annual convention—exposition will be held March 6-10 at the Conrad Hilton Hotel, Chicago, Ill. The association plans to increase the size and scope of the Frozen Food Exhibit and the supplier's Exposition so that the two will be completely representative of the industry.

Red Cherry Institute Names New Exec.-Secy.

James H. Bryce of Lodi, Calif., has been appointed executive secretary of the National Red Cherry Institute, according to Everett Wiles, president of the Institute. His appointment became effective January 1, 1960.

Mr. Bryce was formerly general manager of Diamond Walnut Growers, Inc., Stockton, Calif. He succeeds William B. Powell as executive secretary of NRCI. The association headquarters will remain 35 W. Wacker Drive, Chicago, Ill.

Pickle Packers Appoint A Scientific Advisor

Dr. John L. Etchells becomes the first occupant of a scientific advisory post of the National Pickle Packers Assn.

Dr. Etchells, a research bacteriologist for the U.S. Department of Agriculture's fermentation laboratory in Raleigh, N. C., was named to the new position during the association's recent annual meeting in Chicago.

Dr. J. L. Etchells

The duties of the scientific advisor to the NPPA research committee include forming policies for the NAAFP on the direction of effective pickle research, coordinate existing research programs, and looking for new ones.

Dr. Etchells comes to the association with a reputation gained over 25 years in bacteriological research. Some of his early work was done at the New York State Psychiatric Institute and Hospital. In 1935, he moved to Raleigh.

He is a member of many technical societies and has written scores of scientific articles. He has an outstanding reputation for his work in fermentation systems of food products.

Name Change

The National Frozen Food Distributors Assn. has changed its name to National Frozen Food Assn. If the association is to be addressed legally, an "Inc." should be added to its name.

GET THAT UNIFORM DISTRIBUTION OF STEAM DURING STERILIZATION SO IMPORTANT TO QUALITY . . .

BERLIN CHAPMAN Retorts

BERLIN CHAPMAN Retorts provide uniform distribution of steam during the sterilization process, so important to quality. All Retorts are designed so that the equipment attached to them and the piping with which they are fitted can be varied for all processing conditions both for cooking tin cans and glass jars under pressure. All Retorts are electric welded and perfectly smooth on the inside . . . choice of screw clamps or eccentric closing clamps. Standard legs are welded angle and not adjusted . . . adjustable legs available at additional cost. BERLIN CHAPMAN Retorts are the ultimate in design and manufacture . . . the reason that no BERLIN CHAPMAN Retort has ever been replaced by another make.

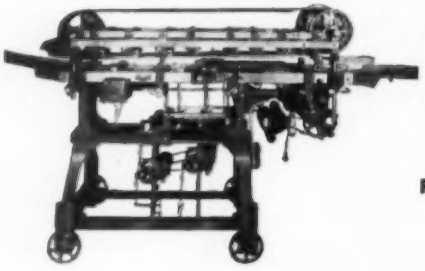
Also HORIZONTAL AND SMALL RETORTS

Large size Horizontal Retort with 2 types of doors, made with various types of trucks and cages . . . usually furnished with 2 cage, 3 cage, and 4 cage lengths from 42" to 54" diameter, single door or double door. Small Retorts to meet the demand where food is processed in smaller quantities, size 30" diameter by 26" deep.

Write for complete details on type Retorts needed for your production.

SINCE 1908 BERLIN CHAPMAN CO.
BERLIN • WISCONSIN
A DIVISION OF BERLIANA CORP.

LOWER YOUR LABELING COSTS
WITH A BURT NON-STOP LABELER



Make the most of every minute with a high-speed Burt Model AUS Non-Stop Labeler. Burt Labelers can operate continuously around the clock. One operator can easily control one or several Labelers.

For fast . . . easy . . . economical labeling . . .

Get a . . . . BURT

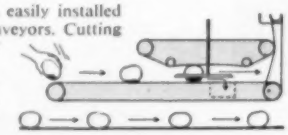
BURT MACHINE COMPANY
401 E. Oliver Street
Baltimore 2, Maryland

CUT
TOMATO TRIMMING COSTS!

Remarkable **NEW** Automatic Tomato Trimmer

- **Cuts trimming costs more than half!** No hand trimming needed . . . you save up to 75% in labor costs.
- **Boosts production** . . . automatic trimming increases output many tons per hour.
- **Eliminates unnecessary product waste** . . . automatic trimmer pays for itself many times over.
- **Trims out black spots automatically.**

Tomato trimmer is easily installed on any existing conveyors. Cutting parts are made of stainless steel . . . the trimmer is easy to clean . . . easy to maintain.



Want more Details? Specifications? Prices? write:

F. H. LANGSENKAMP CO.
227 E. SOUTH ST. • INDIANAPOLIS 25, INDIANA

For the REAL News

Not just what is new in the processed food industry, but what is both new and IMPORTANT. And WHY it is important. And what it means to YOU.

Read the monthly issues of CANNER/PACKER regularly. CANNER/PACKER has it all.

NEW EQUIPMENT/SUPPLIES

Plastic Package Former

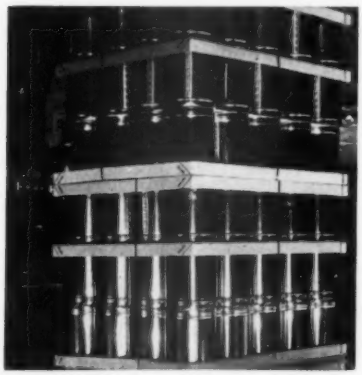
DESCRIPTION: Machine forms sheet plastic into packages without the use of heat. Trade name: Plasti-Lok.

FEATURES: Cold-folds and locks unscored die-cut plastic blanks into trays at speeds of 40 to 100 per minute.

MFR.: R. A. Jones Co., 315 E. 15th St., Covington, Ky.

Pallet System

DESCRIPTION: A type of palletizing for 30# cans aligned on corrugated fibre base trays, five cans long and four wide—three layers. The top layer is covered by an inverted tray. The pack is secured by one steel strap length-wise and one across.



FEATURES: Advantages of the tray-pack method include a savings in man-time labor and in storage. Tray-pack units can be stacked to any ceiling height.

MFR.: National Can Corp., 3217 W. 47th St., Chicago 32, Ill.

Food Flavor

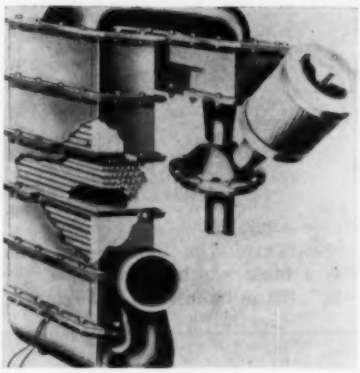
DESCRIPTION: This new flavor is a barley-malt meal dried in wood smoke which can be used by food processors as a seasoning. Trade name: Char-Zyme.

FEATURES: Char-Zyme simulates those flavors associated with open-fire broiling. It can be added to steaks, hamburgers, poultry, eggs, gravies, etc. One part of this to 100 parts of any processed food adds a "smoky" taste.

MFR.: Red Arrow Products Corp., P.O. Box 1463, Milwaukee, Wis.

Exhaust Purifiers

DESCRIPTION: Catalytic exhaust purifiers reduce carbon monoxide and other fumes from combustion engines on fork lift trucks.



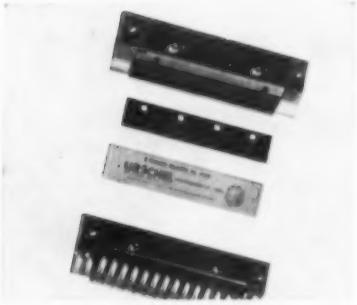
FEATURES: Muffler-like units reduce CO hydrocarbons by an average of 85-95%. Use of Purifiers reduces the need for pulling in outside air for ventilation thus allowing humidity control in warehousing.

MFR.: Oxy-Catalyst, Inc., Wayne, Pa.

Throw-Away Knife

DESCRIPTION: A newly-shaped knife that mechanically slices food products.

..."MARY, GIVE ME MY ROBINS CATALOG. I'LL GET THAT LINE OPERATING EFFICIENTLY!!"
A.H.Robins
The Robins catalog shows hundreds of proved, efficient machines that keep production of quality products moving. Consult it—often. If you don't have a copy, write, wire or call
A.K.Robins AND COMPANY, INC.
Manufacturers of Food Processing Machinery since 1855
713-729 East Lombard Street • Baltimore 2, Maryland
THE ROBINS LINE INCLUDES EQUIPMENT FOR PROCESSING



Trade name: Model "CC" Slicer.

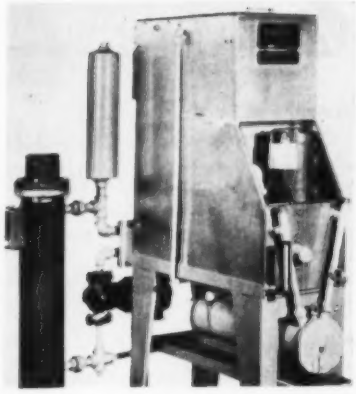
FEATURES: This throw-away knife has a blade which measures ¾" by 4⅛". It can be inserted and removed from the holder in seconds. It is designed to cut plain and corrugated slices. They are packed in lots of 96.

MFR.: Urschel Laboratories, Inc., 7300 N. St. Louis Ave., Skokie, Ill.

Frost Preventor

DESCRIPTION: New automatic apparatus for preventing frost from accumulating on the refrigerated coils of large-scale commercial freezing and cold storage installations. Trade name: Niagara "No-Frost" Concentrator.

FEATURES: The equipment disposes of condensed moisture. A hot water heater is used to evaporate and remove the water.

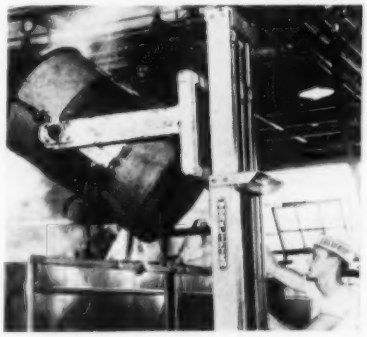


MFR.: Niagara Blower Co., 405 Lexington Ave., New York 17, N. Y.

Lift Truck Cradle

DESCRIPTION: Electric lift truck is equipped with worm gear tilting cradle to dump open head barrels and drums into vats and hoppers up to 8 ft.

FEATURES: Entire operation of lifting, dumping and lowering takes about



two minutes. The loads are lifted hydraulically by a motor powered pump unit at 15 ft. a minute.

MFR.: Economy Engineering Co., 4501-4523 W. Lake St., Chicago 24, Ill.

Packaging Machine

DESCRIPTION: This machine positions and crimps aluminum foil on frozen dinner trays, pot-pie pans, and a variety of aluminum trays. Trade name: "Reycon Tuckwrap."

FEATURES: Crimp seals containers tightly with an extra firm crimp on corners and is geared for either straight-line operation or right angle discharge.

MFR.: Reynolds Metals Co., 6601 W. Broad St., Richmond 18, Va.; and Hayssen Manufacturing Co., N. 13th & St. Clair, Sheboygan, Wis.

Paperboard Pallet

DESCRIPTION: This pallet has a corrugated paperboard body with wood veneer reinforcing. It looks and loads

DEPEND ON ABC for COMPLETE corrugated container PACKAGING SERVICE

ABC customer service includes:

- ✓PACKAGE DEVELOPMENT
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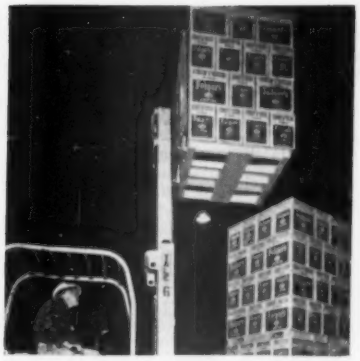

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MFR.: Materials, Inc., P.O. Box 24, Oakland 4, Calif.

Circulars, Bulletins Catalogues, Brochures

Coolers & Dryers: 32-page book describes and illustrates electric and mechanical vibrating type coolers and dryers of both the direct and indirect type—Jeffrey Mfg. Co., Columbus 16, Ohio.

Temperature Controls: Catalog sheet, MC-186, describes in detail surface mounting temperature controls, Series 3000—Fenwal Incorporated, Pleasant St., Ashland, Mass.

Cannery Paints: Data bulletin #2551 describes the use of Cooker Red Enamel for brush or spray application — Chem-Guard Products Inc., 1015 Commercial St., San Carlos, Calif.

Organic Chemicals: 28-page Physical Properties booklet describes more than 400 synthetic organic chemicals including applications, shipping data, etc.—Union Carbide Chemicals Co., 30 E. 42nd St., New York 17, N. Y.

Cotton Belting: Handbook on solid woven cotton belting gives standards, characteristics, and applications for various beltings—Woven Fabric Belting Manufacturers Assn., 11 West 42nd St., New York 36, N. Y.

Walking Beams & Roll-Thrus: Eight-page brochure (No. P-591) illustrates and describes the walking beams and roll-thrus as to function, construction and capacity — Horix Manufacturing Co., Corliss Station, Pittsburgh 4, Pa.

Bulk Handling: Technical report (Fact File ER-G-6) uses case histories to illustrate recent advances in the handling of bulk materials by using pneumatic equipment—Fuller Co., Catasauqua, Pa.

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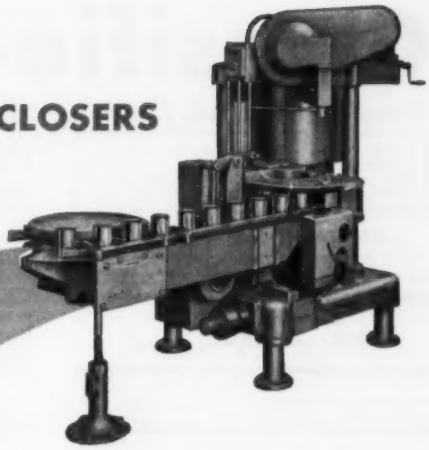

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LIQUIDATION!—Modern Fruit and Tomato Cannery selling out piece-meal, some recently installed. Wire for prices: #303/2½ FMC 2380-can PRESSURE COOKER & COOLER. Atmospheric Continuous Cookers & Coolers: 1656-can #303/1T.; 2380-can #2½; 410-can 46 oz.; 640-can #10; all with Recording Controls. CONTINENTAL CLOSING MACHINES: #2½ CR and 9DS; #303 Model 9DS; #10 Model 8DS. FMC Stainless PULPER & FINISHER #100. 42" FMC Brass Roller TOMATO SCALDER & WASHER. 20-valve #2½ FMC SYRUPER & DRAINER. 12 FMC Rotary Double Clingstone Peach PITTERS, 1955 Model. 20 TPH DUNKLEY LYE PEELER. Also GRADERS, SYRUPERS, EXHAUSTERS, PREHEATERS. Get complete list. Specialists in Cannery Equipment. HORNE MACHINERY CO., INC., 1188 Harrison St., San Francisco 3, Calif.

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FOR SALE—Salting stations complete with indoor tanks located in Galien, Buchanan and Sherwood, Michigan. For details write: The Albro Packing Company, Springboro, Pennsylvania.

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COMING EVENTS CALENDAR

February

8-10—**Western Frozen Food Processors Assn.,** 16th annual meeting. Mark Thomas' Inn, Monterey, Calif.

8-10—**5th Military-Industry Packaging and Materials** Handling Symposium, Sheraton Park Hotel, Washington, D. C.

9-10—**Fruit and Vegetable Processors,** annual conference, Fort Hayes Hotel, Columbus, Ohio.

18—**National Red Cherry Institute,** 28th annual National Cherry Pie Baking Contest, Sheraton Hotel, Chicago, Ill.

21-23—**Food Brokers' Assn. of Canada,** annual meeting, Chateau Frontenac, Quebec City, P.Q., Canada.

22-24—**Canadian Food Processors Assn.,** annual convention, Seigniory Club, Montebello, Quebec.

27-29—**Virginia Canners Assn.,** 52nd annual convention, Hotel John Marshall, Richmond, Va.

March

3-4—**Pennsylvania Canners Assn.,** annual workshop, Allenberry Lodge, Boiling Springs, Pa.

3-4—**Better Foods for Better Nutrition Conference,** University of Georgia, Athens, Ga.

6-10—**National Assn. of Frozen Food Packers,** 19th annual convention, Conrad Hilton Hotel, Chicago, Ill.

13-16—**National American Wholesale Grocers' Assn.,** annual meeting and convention, Palmer House, Chicago, Ill.

14-15—**Tri-State Packers' Assn.,** annual spring sales meeting, DuPont Hotel, Wilmington, Dela.

18-19—**Refrigeration Research Foundation,** symposium on package environment in refrigerated warehouses, LaSalle Hotel, Chicago, Ill.

19-23—**National Peanut Council,** annual convention, Stardust Hotel, Las Vegas, Nev.

20-22—**Canners League of Calif.,** 56th annual meeting, Santa Barbara Biltmore, Santa Barbara, Calif.

21-24—**Institution Food and Supply Show,** New York Trade Show Bldg., New York, N. Y.

22-23—**Wisconsin Canners Assn.,** spring meeting, Wisconsin Center Bldg. and Loraine Hotel, Madison, Wis.

22-23—**Folding Paper Box Assn.,** annual meeting, Ambassador Hotel, Los Angeles, Calif.

24-30—**P. S. Wholesale Grocers' Assn.,** convention and exposition, Dallas Memorial Auditorium, Dallas, Texas.

25-26—**Northwest Canners & Freezers Assn.,** membership conference, Gearhart Hotel, Gearhart, Ore.

27-30—**Southwest Canners Assn.,** annual meeting, held jointly with Texas Wholesale Grocers Assn. and U. S. Wholesale Grocers Assn., Statler-Hilton, Dallas, Texas.

April

5-7—**Indiana Canners Assn.,** spring meeting, Purdue University, Lafayette, Ind.

6-8—**National Pickle Packers Assn.,** western regional meeting, Mark Thomas Inn, Monterey, Calif.

21-22—**National Fruit & Syrup Mfrs. Assn.,** 43rd annual convention, Savoy Hilton, New York City.

23-27—**Cooperative Food Distributors of America,** 11th annual meeting, Statler Hotel, Washington, D. C.

28-29—**Dried Fruit Assn. of Calif.,** annual meeting, Mark Thomas Inn, Monterey, Calif.

28-29—**National Pickle Packers Assn.,** spring meeting, Drake Hotel, Chicago, Ill.

29-May 4—**National Fisheries Institute,** 15th annual meeting, Fountainbleau Hotel, Miami, Fla.

May

1-4—**Super Market Institute,** 22nd annual meeting, Auditorium, Atlantic City, N. J.

13-14—**National Frozen Food Distributors,** directors meeting, Cloisters, Sea Island, Ga.

15-19—**Institute of Food Technologists,** annual meeting, San Francisco, Calif.

Merchandising Calendar

Mar. 2-Apr. 17: It's Fish'n Seafood Time (Natl. Fisheries Inst., 1614-20th St. N. W., Washington 9, D. C.). POP

Mar. 2-Apr. 17: Canned Salmon Lenten Promotion (Canned Salmon Inst., 200 Coleman Bldg., Seattle 4, Wash.).

Mar. 5-12: National 4-H Club Week.

Mar. 6-12: Natl. Peanut Week (Natl. Peanut Council, duPont Circle Bldg., Washington 6, D. C.).

Mar. 20-26: Natl. Rice Week (Rice Consumer Service, Realty Bldg., Louisville 2, Ky.).

Apr. 1-30: Pearadise-in-April Month (Bartlett Pear Growers of Calif., Ore., and Wash., Lola Barden, Pacific Natl. Advertising Agcy., 2124 4th Ave., Seattle, Wash.).

Apr. 1-30: Cereal & Milk Spring Festival (Cereal Inst., Inc., 135 So. LaSalle St., Chicago 3, Ill.).

Apr. 1-Nov. 30: Strawberry Point-of-Sale Promotion (Calif. Strawberry Advisory Bd., P. O. Box 57, Santa Clara, Calif.).

Apr. 17-23: Honey for Breakfast Week (Am. Honey Inst., 114 No. Carroll St., Madison 3, Wisc.).

Apr. 30-May 7: Natl. Baby Week (Gerber Baby Foods, Fremont, Mich.).

May 2-9: Natl. Raisin Week (Calif. Raisin Advisory Board, Box 1963, Fresno, Calif.).

May 7-14: Natl. Frozen Food Week Natl. Frozen Food Distribs. Assn., 60 E. 42nd St., New York 17, N. Y.).

May 19-28: Natl. Pickle Week (Natl. Pickle Packers Assn., 202 So. Marion St., Oak Park, Ill.).

June 1-Aug. 31: Kraut Salad Season (Natl. Kraut Packers Assn., 202 So. Marion St., Oak Park, Ill.).

June 16-25: Natl. Mayonnaise and Salad Dressing Week (Mayonnaise and Salad Dressing Mfrs. Assn., 332 S. Michigan Ave., Chicago 4, Ill.).

July 1-31: Natl. Iced Tea Time (Tea Council of the U.S.A., 16 E. 56th St., New York, N. Y.).

July 1-31: Natl. Hot Dog Month (Natl. Hot Dog Month Council, 3520 S. Morgan Ave., Chicago 9, Ill.).

July 1-31: Natl. Picnic Month (American Bakers Assn., 20 N. Wacker Dr., Chicago, Ill.).

July 31-Aug. 2: Maine Seafoods Festival.

Aug. 1-31: August is Sandwich Month (Wheat Flour Institute, 309 W. Jackson Blvd., Chicago 6, Ill.).

I.F.T. Sections Calendar of Meeting Dates

Western

Puget Sound: Feb. 16, at National Canners Lab., Seattle, Wash., Dr. Steers, Food & Drug Adm., Seattle, on "Food Additives."

Midwest

Chicago: Feb. 8, 6:00 p.m., at Midland Hotel, Dr. Ernest Allen, chief, Div. of Research Grants, Natl. Institutes of Health, on "Grant and Award Program of the Natl. Inst. of Health."

Great Lakes: Feb. 5, 10 a.m., tour at Food & Drug Laboratory, Detroit, Mich., and 3 papers for the afternoon session: "Salt in the Food Industry" by Dr. Klomparenz; "Wine Manufacture" by Mr. Bonhaus; and "Food & Drug Adm. Activities" by Dr. Bollinger.

Ohio Valley: Feb. 19, 1:00, at Ohio State University, Columbus, Dr. J. B. Brown, director, Institute of Nutrition and Food Technology, OSU, and Dr. I. Hutchings, H. J. Heinz Co., Pittsburgh, Pa., on "Public Health Aspects of Food."

Eastern

Maryland: February meeting, 7:00, at Log Cabin, Beltsville, William J. Hoover, manager of tech. serv., Corn Industries Research Foundation, on "Corn Refining Industry and the Work of the Corn Industries Foundation."

New York: Feb. 17, 6 p.m., at Brass Rail, Dr. I. J. Hutchings, president-elect of the Institute of Food Technologists, on "Food and the Food Technologist."

Northeast: Feb. 16, 6:30 p.m., at M.I.T. Faculty Club, Cambridge, Mass., Donald R. Hall, of Instrument Development Laboratory, Atteboro, Mass., on "Colorimetry in the Food Industries."

Philadelphia: Feb. 2, John Bard, Oscar Mayer Products, on "Application of Quality Control in Meat Processing."

Southern

Dixie: Feb. 4, 6:30 p.m., at Emory University, Alumni Memorial Bldg., Atlanta, Ga., Dr. Ernest Guenther, vice president, Fritzsche Brothers, Inc., on "Essential Oils in South America."

Are You Ready for What the Sixties Will Bring?

We are now launched in what is not only a new year but also a new decade. It is prudent, therefore, to pause for a moment and consider what the Sixties have in store for the processed foods business.

While I don't pretend to be adept at crystal-ball-gazing, here are some developments which I think we can all expect, and for which packers of canned, dry, frozen and glassed foods should prepare.

Raw Product Procurement

In the fruit-vegetable field, a major switchover will occur from manual to mechanical harvesting. Not only will many new machines be developed, but plants and trees will be modified to facilitate the use of these machines.

Secondly, much progress will occur in mechanization of raw product deliveries to the plants. More and more tonnage will be handled in boxes and bins which can be palletized, and powered lifttrucks will load these in the fields and orchards and unload them at the plants. Water will be used more commonly for highway transport, for receiving and inplant handling.

Thirdly, the role of the fieldman, or raw product manager, will be greatly enhanced. Not only will he be concerned with the changes mentioned above, but he will also carry the heavy responsibility of controlling his producers' use of agricultural chemicals, now coming under strict control by federal agencies. Further, he will have much to keep up with in such fields as soil analysis, plant nutrients, weather control, specialized production demands—all of which will require more technical training, more management-type decisions.

Production Progress

Automation and mechanization will be encouraged materially through consolidation of processing plants into fewer and larger units. Some of these will result from elimination of marginal operations within companies, others from mergers of two or more firms, but all will give greater opportunity for use of high-speed modern equipment.

Emphasis on quality control will be increased. This will be essential not only because of enforcement of the Food, Drug & Cosmetic Act provisions by federal agents, but also because tight profit margins will make it impossible to stand spoilage losses and pack downgrading previously accepted in some firms.

Many alterations in the form of products can be expected, to fit foods better for automation. If a liquid or semi-liquid has the same nutrients as a solid, but can be handled better mechanically, or can be processed by continuous instead of batch methods, the industry's economics will force a move toward the better-mechanized materials.

Packaging and Merchandising

The conflict for consumer preference between packer brands and buyer labels will continue strongly in the coming decade, without a victory for either side. But more frozen foods, and probably more glassed and dried items, will be packed and stored "bright" (without labels or overwraps) to provide flexibility for private label processors.

Strong regional packers will have success in establishing their brands in limited areas, some of them through franchising arrangements whereby one chain or group of retailers will have exclusive right to the brand in its district.

A constant flood of new products will appear in the markets. Convenience foods—blended and prepared items nearly or completely table-ready—will become more and more numerous, in all four processed forms. Many of the new ones will be nationality items— specialties of a foreign land either packed here or imported for domestic markets. Gourmet foods—high-priced specialties—will also become increasingly popular. Some of the new packs, however, will be well-known old favorites or blends, never preserved before.

As world income levels grow, U.S. packers' interest in overseas markets will also gain. Many additional firms—not just the giants, but enterprises of modest size—will establish foreign subsidiaries and affiliates, while others will work harder at building up export trade.

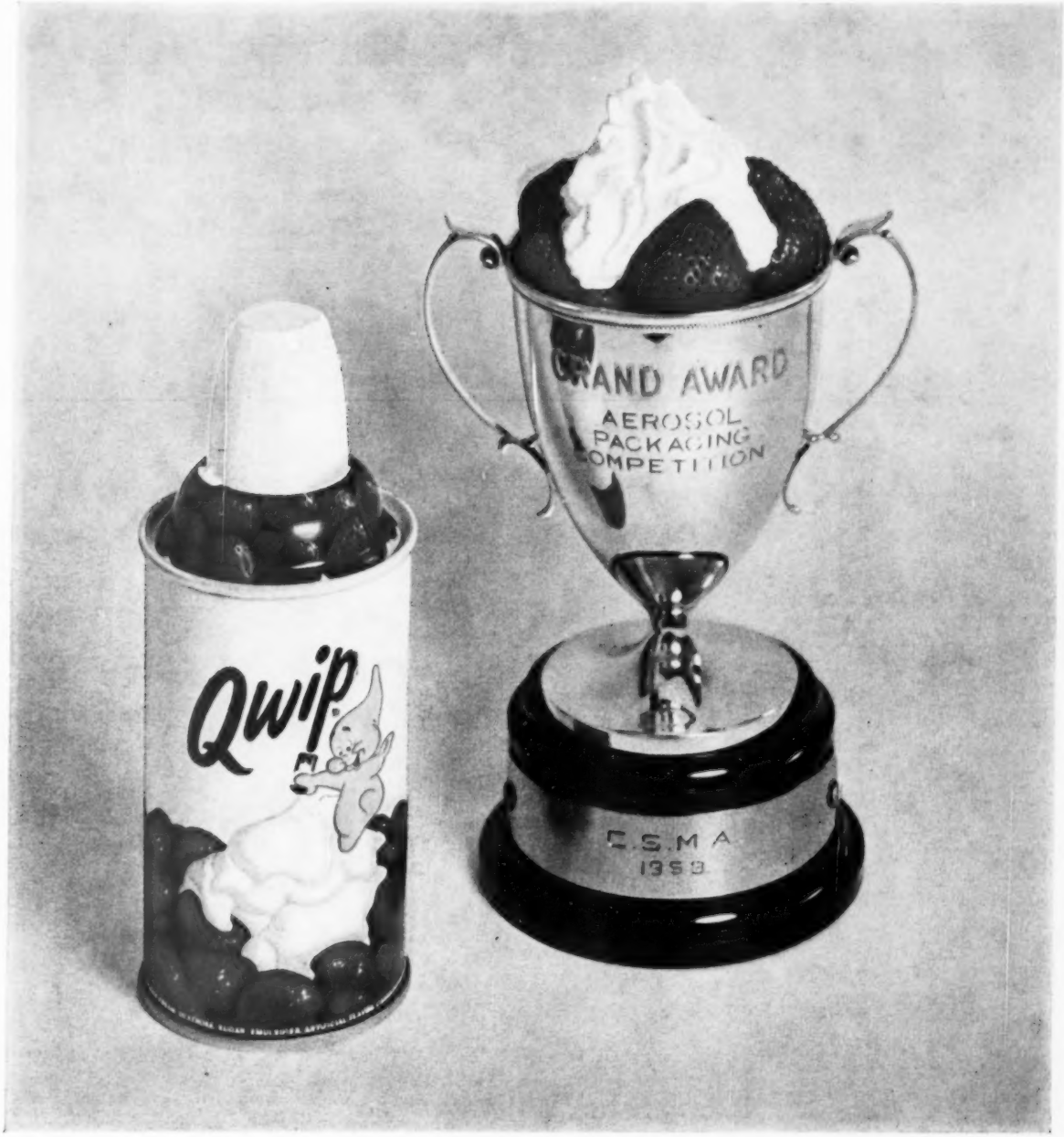
Nutrition and Technology

The food value of food, and how to preserve and augment it, increasingly will concern the industry. In part, this will result from improved knowledge of nutrition, both for the average consumer and for those with specialized needs. In part, it will be a product of new and better machinery, and the availability of more nutrient materials capable of being used to supplement what nature provides. In part, it will stem from more interest in nutritive values by the consumer, making it easier to merchandise products with plentiful nutritional facets.

With this greater awareness of food values—and also as a result of most of the other developments we can expect in the near future—food packers will lean increasingly on technologists and technology. The old kitchen skills will less and less suffice to check the machines, use the additives and conserve the nutrients of the modern era. And so we'll have more food technology schools, and tougher courses in them.

These are some of the things I look forward to in the scintillating Sixties. How do they match what you see in your crystal ball?

El Stark
Editor



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CONGRATULATIONS TO QWIP! In the 1959 Aerosol Packaging Awards Competition—Sponsored by the Chemical Specialties Manufacturers Association—this container for Qwip Dessert Topping won the Grand Award and top honors in the food products division. The Qwip container was manufactured by Canco for the Avoset Co.

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